CITY OF NEWTON PURCHASING DEPARTMENT

CONTRACT FOR PUBLIC WORKS DEPARTMENT (M.G.L. Ch. 30, Sec. 39M)

PROJECT MANUAL: RECONSTRUCTION OF THE TENNIS COURTS AT NEWTON SOUTH HIGH SCHOOL INVITATION FOR BID #15-134

Bid Opening Date: July 9, 2015 at 10:00 a.m.

JUNE 2015 Setti D. Warren, Mayor

CITY OF NEWTON

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RECONSTRUCTION OF THE TENNIS COURTS AT NEWTON SOUTH HIGH SCHOOL

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END OF SECTION

CITY OF NEWTON PURCHASING DEPARTMENT INVITATION FOR BID #15-134

The City of Newton invites sealed bids in accordance with M.G.L. c.30, §39M from Contractors for:

RECONSTRUCTION OF THE NEWTON SOUTH HIGH SCHOOL TENNIS COURTS

Bids will be received until:

10:00 a.m., Thursday, July 9, 2015

at the Purchasing Department, Room 201, Newton City Hall, 1000 Commonwealth Avenue, Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the deadline for bids. Immediately following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

The work under this contract is for the full reconstruction of the existing bituminous surfaced tennis court system including access walkways and perimeter fencing.

Contract Documents will be available online at www.newtonma.gov/bids or pick up at the Purchasing Department after 10:00 a.m., on June 25, 2015.

Bids must be submitted with one Original and one Copy.

A bid deposit in an amount that is not less than five percent (5%) of the value of the bid, <u>including</u> all add alternates, is required. Bid deposits, payable to the City of Newton, shall be either in the form of a bid bond, or cash, or a certified check on, or a treasurer's or cashier's check issued by, a responsible bank or trust company. The costs of any bond and any insurance required in this Invitation For Bid are the responsibility of the bidder; such costs will not be reimbursed by City and should be included in your bid.

The City of Newton will award the contract to the lowest eligible and responsible bidder. Please Note: this bid, in accordance with the Chapter 303 Acts of 2008, contains Price Adjustments and new Prevailing Wage requirements. All bidders are required to familiarize themselves with these terms and conditions before submitting a bid.

Anticipated start date is August 15, 2015. Time for completion is seventy five (75) days from the Notice To Proceed.

All bids are subject to the provisions of M.G.L. Chapter 30, Section 39M. Wages are subject to minimum wage rates determined by the Massachusetts Department of Labor and Industries pursuant to M.G.L. Chapter 149, Sec. 26 to 27H. The schedule of wage rates applicable to this contract is included in the bidding documents. In addition, the prevailing wage schedule will be updated annually for all public construction projects lasting longer than one (1) year. You will be required to pay the rates set out in any updated prevailing wage schedule. Increases in prevailing wage schedules will not be the basis for change order requests. The successful bidder will be required to provide a Certificate of Insurance demonstrating current coverage of the type and amounts set forth in the Project Manual. The successful bidder will be required to furnish a Labor and Materials Payment Bond in the amount of 50% of the contract total. Wages are paid to drivers for all "on-site" work.

Once you've downloaded this bid from the internet website (www.newtonma.gov/bids) I strongly suggest you email (purchasing@newtonma.gov) your company's Name, address, EMAIL, phone, fax AND the INVITATION FOR BID NUMBER and Project Title, so that we may add you to the Bidders List and you will be notified of any/all addendums.

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

CITY OF NEWTON

Nicholas Read

Chief Procurement Officer

Ba Rul

June 25, 2015

CITY OF NEWTON

DEPARTMENT OF PURCHASING

INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
 - 1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
 - 2. The Bidder has visited the work site and is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents and work site will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will only answer such requests if received by **July 1, 2015 at 12:00 noon**. In the event that the bid opening date is changed, the deadline for informational requests may also change as provided in an addendum issued by the City.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Receipt of all addenda issued must be acknowledged in the Bid Form. YOUR FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN YOUR BID BEING REJECTED AS NON-RESPONSIVE.
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and INVITATION FOR BID #15-134.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on "Bid Form #15-34," attached.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 Bid Deposits shall be submitted in the amount specified in the Invitation for Bids. They shall be made payable to the City and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submisssion date. **Be** advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.

Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the City-Contractor agreement.

- 4.5 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:
 - * GENERAL BID FOR: #15-134
 - * NAME OF PROJECT: Reconstruction of the Tennis Courts at Newton South High School
 - * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER
- 4.6 Date and time for receipt of bids is set forth in the Invitation for Bids.
- 4.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.8 Bids shall be submitted with one **original** and one **copy.**
- 4.9 Be advised that a new Massachusetts law has been enacted that required all employees who work on Massachusetts public works construction sites must have no less than 10 hours of OSHA-approved safety and health training. See Chapter 306 of the Acts of 2004, which became effective July 1, 2006.
 - 1. This requirement will apply to any general bid or sub bid submitted.
 - 2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
 - 3. The contractor and all subcontractors on this project will be required to provide certification of compliance with this requirement. Non-compliance with this law will disqualify you from bidding on public contracts.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

ARTICLE 7 - CONTRACT AWARD

- 7.1 The City is soliciting prices for items set forth in the Item Sheets, attached at pp. 11-18 below. It is the City's intent to award one (1) contract to the responsible and eligible bidder offering the lowest price on its Base Bid plus as many Alternates as the City elects to include in the project. Alternates will be included in the award in the same sequence as they appear in the Item Sheets, with no Alternate included unless all prior Alternates in the sequence are also included. Contracts will be awarded within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.
- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

ARTICLE 9 – PROPRIETARY SPECIFICATIONS

9.1 The City has used a proprietary specification to describe the supply listed in the specifications. Such specifications are permitted under M.G.L. c. 30, §39M(b), provided that the City states in writing that use of the proprietary specification is in its best interest and that it will accept an "equal" of the item specified. An item is considered equal if (i) it is at least equal in quality, durability, appearance, strength, and design; (ii) will perform the intended function at least equally; and (iii) conforms substantially, even with deviations, to the detailed requirements contained in the specifications. In the event that the Bidder wishes to substitute an equal item, it may do so only in its bid or proposal, and the contract award shall be conditioned on the Bidder providing the item originally specified or an equal item accepted by the City and identified in the contract. In no event shall the Bidder be entitled to offer, or the City obliged to consider, the substitution of an item as

equal after the award of a bid. In the event the Bidder substitutes or attempts to subst shall be in breach thereof and be liable for actual and consequential damages resultin agreed. The City shall have the sole right to determine whether or not said item is equ	g from its failure to perform as
The required determination and justification have been duly prepared, and a copy may Massachusetts Public Records Law, M.G.L. c. 66, §10.	y be requested in accordance with the
END OF SECTION	

9.2

CITY OF NEWTON

DEPARTMENT OF PURCHASING

BID FORM #15-134

A. The undersigned proposes to supply and deliver the materials specified below in full accordance with the Contract Documents and Project Manual supplied by the City of Newton entitled:

RECONSTRUCTION OF THE TENNIS COURTS AT NEWTON SOUTH HIGH SCHOOL

for the o	contract price specified be	low, subject to a	dditions and deduction	n according to the terms of the specifica	ations.
This bio	l includes addenda numbe	er(s),			
may be	issued earlier than the ger	neral goal of with	nin 30 days of receipt	of the invoice only when in exchange for	
Prompt	Payment Discount	%	Days		
The Cor	ntractor shall insert prices	for each item in	ink, in both words an	l figures.	
D.1	The proposed contract p	rice for Total Ba	ase Bid (Items 1 to 26) is:	
	(TL, C,, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	lll l d T	Col Discourse	Dollars (\$)
			_	d on the Items Sheets attached hereto.)	
D.2	The proposed contract p	rice for Add Alte	ernate No. 1 is:		
	(The figure inserted abo	ve shall be the T	otal Alternate 1 Bid	Dollars (\$) hereto.)
D.3					,
				Dollars (\$)
(The fig D.4				h in the Item Sheets attached hereto.)	
				Dollars (\$)
(The fig	ure inserted above shall l	pe the Total Alter	rnate 3 Bid as set for	h in the Item Sheets attached hereto.)	
D.5	The proposed contract p	rice for Add Alte	ernate No. 4 is :		
				Dollars (\$)
	This bid Prompt may be discount Prompt Prompt The Cond D.1 D.2 D.3 (The fig D.4	This bid includes addenda number Prompt Payment Discounts. Bidd may be issued earlier than the ger discounted prices. Discounts will Prompt Payment Discount Prompt Payment Discount Prompt Payment Discount The Contractor shall insert prices. D.1 The proposed contract proposed contr	This bid includes addenda number(s), Prompt Payment Discounts. Bidders are encourage may be issued earlier than the general goal of with discounted prices. Discounts will not be consider that the general goal of with discounted prices. Discounts will not be consider that the general goal of with discounted prices. Discounts will not be consider that the general goal of with discounted prices. Discounts will not be consider that the general goal of with discounted prices. Discounts will not be consider that the general goal of with discounted price and the general goal of with discounted price and the general goal of with discounted price and the general goal of with discounted prices. Discounted prices for add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices. Discounted prices for Add Alton that the general goal of with discounted prices for Add Alton that the general goal of with discounted prices for Add Alton that the general goal of with discounted prices for Add Alton that the general goal of with the general goal of with discounted prices for Add Alton that the general goal of with the general goal of with discounted prices for Add Alton that the general goal of with the general goal of with th	This bid includes addenda number(s),,,, Prompt Payment Discounts. Bidders are encouraged to offer discounts may be issued earlier than the general goal of within 30 days of receipt of discounted prices. Discounts will not be considered in determining the discounted prices. Discounts will not be considered in determining the discounted prices. Discount	Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder. Prompt Payment Discount

The low Bidder will be	deteremined on the	basis of the sum	of the Base Bid and	the accepted alternates, if any.

COMPANY NAME:

- E. The undersigned has completed and submits herewith the following documents:
 - O Signed Bid Form, 2 pages
 - O Bidder's Qualifications and References Form, 2 pages
 - O Certificate of Non-Collusion, 1 page
 - O Debarment Letter, 1 page
 - O IRS W-9 Form, 1 page
 - O Item Sheets, 8 pages
 - O A five percent (5%) bid deposit.
- F. The undersigned agrees that, if selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the City of Newton, execute a contract in accordance with the terms of this bid a labor and materials payment bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the City of Newton in the sum not less than 50% of the contract price, the premiums for which are to be paid by the contractor and are included in the contract price.

The undersigned hereby certifies that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A of M.G.L. Chapter 30, s 39M.

The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

The undersigned further certifies under the penalties of perjury that they have familiarized themselves with the changes to the Prevailing Wage Rates, Price Adjustment Clauses, in accordance to Chapter 303 Acts of 2008.

Name and Title of Signatory)
Name and Title of Signatory)
ss Address)
ate Zip)
/
one) (FAX)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

ITEM SHEETS - BASE BID:

ITEM DESCRIPTION & BID PRICE		EST	UNIT	TOTAL	COST
		QTY			
ITEM: 1 - MOBILIZATION (LAYOUT SERVICES, PHO CONFERENCES, NOTIFICATIONS, ADMINI					
THE SUM OF:					
	_ DOLLARS				
AND	_ CENTS				
(\$) PER	LUMP SUM	1	L.S.	\$	
ITEM: 2 – REMOVE & DISPOSE OF THE EXISTING CH. SYSTEM	AIN LINK FENCE				
(INCLUSIVE OF COMPACTING THE RESIDU	AL APERTURES)				
THE SUM OF:	DOLL ADG				
	_ DOLLARS				
AND	_ CENTS				
(\$) PER	LUMP SUM	1	L.S.	\$	
ITEM: 3 – REMOVE & DISPOSE OF AN EXISTING NET NET POST FOUNDATION (INCLUSIVE OF COMPACTING THE RESIDU					
THE SUM OF:					
	_ DOLLARS				
AND	_ CENTS				
(\$) PER	EACH	24	EA.	\$	
ITEM: 4 – EXCAVATE & DISPOSE OF UNDESIRAB SURPLUS 'SURFACE GENERATED' MA					
THE SUM OF:	DOLLARS				
AND	_ CENTS				
(\$) PER	CUBIC YARD	3100	C.Y.	\$	

ITEM: 5 – GRAVEL FURNISHED FROM OUTSIDE THE	SITE			
THE SUM OF:	DOLLARS			
AND	CENTS			
(\$) PER	CUBIC YARD	1500	C.Y.	\$
ITEM: 6 – DENSE GRADED CRUSHED STONE				
THE SUM OF:	DOLLARS			
AND	CENTS		G W	
(\$) PER	CUBIC YARD	500	C.Y.	\$
ITEM: 7 – INITIAL PREPARATORY GRADING & GEOTI (INSTALLED UNDER THE COURT AREA				
THE SUM OF:	DOLLARS	9,000	S.Y.	\$
AND		2,000	5.1.	Φ
(\$) PER	SQUARE YARD			
ITEM: 8 – TENNIS NET POST & FOUNDATION				
THE SUM OF:	DOLLARS			
AND_	CENTS			
(\$) PER	EACH	24	EA.	\$
ITEM: 9 - CINCH STRAP & FOUNDATION				
THE SUM OF:	DOLLARS			
AND_	CENTS			
(\$) PER	EACH	12	EA.	\$

ITEM: 9A - TENNIS NET				
THE SUM OF:	DOLLARS			
AND				
(\$) PER	EACH	12	EA.	\$
ITEM: 10 - FURNISH AND INSTALL 10' HIGH P.V.C. CO. FENCE SYSTEM (INCLUSIVEOF FRAMEWORK, FOOTINGS, FABI				
THE SUM OF:	_ DOLLARS	1500	L.F.	\$
AND	_ CENTS	1500	L.F.	Ψ
(\$) PER	LINEAR FOOT			
ITEM: 11 – 3" TYPE I-1 BITUMINOUS CONCRETE FOR PAVEMENT (INSTALLED AFTER FENCE & NET POSTS) THE SUM OF: AND	HAVE BEEN SET) _ DOLLARS _ CENTS	1700	TON	\$
(\$) PER	TON			
THE SUM OF: AND	_ DOLLARS			
(\$) PER	LUMP SUM	1	L.S.	\$
ITEM: 13 – REMOVE & RESET EXISTING CURB				
THE SUM OF: AND	_ CENTS	100	L.F.	\$
(\$) PER	LINEAR FOOT			

ITEM: 14-4" @ 4,000 PSI CEMENT CONCRETE WAL (WITH 2 LBS. OF LAMPBLACK PER CUB)				
THE SUM OF:				
	DOLLARS			
AND	CENTS			
(\$) PER	SQUARE YARD	100	S.Y.	\$
ITEM: 14a-8" @ 4,000 PSI CEMENT CONCRETE CUR (WITH 2 LBS. OF LAMPBLACK PER CUB)				
THE SUM OF:	DOLLARG			
AND				
(\$) PER	SQUARE YARD	50	S.Y.	\$
ITEM: 15 – DISTRIBUTE, GRADE/REGRADE & SEED MATERIAL(S) (REQUIRING TWO 'AFTER-SEED' HA				
THE SUM OF:	DOLLARS			
AND	CENTS			
(\$) PER	SQUARE YARD	2000	S.Y.	\$
ITEM: 16-SUPPLEMENTAL LOAM (IF ORDERED BY THE ENGINEER)				
THE SUM OF:	DOLLARS			
AND				
AND		250	G T T	
(\$) PER	CUBIC YARD	350	C.Y.	\$
ITEM: 17 -TEMPORARY GRAVEL DRIVEWAY				
THE SUM OF:				
	DOLLARS			
AND	CENTS			
(\$) DED	SOLIADE VADD	125	CV	¢

ITEM: 18 – ALLOWANCE FOR MISCELLANEOUS WO (ENGINEERS DISCRETIONARY FUND)	DRK			
THE SUM OF: TWENTY THOUSAND	DOLLARS	1	ALL.	20.000
ANDNO_			THEE.	\$ 20,000
(\$) PER				
ITEM: 19- FURNISH & MOUNT SAFETY & SPECIAL (INCLUDING THE POST SYST)				
THE SUM OF:	DOLLARS			
AND				
(\$) PER		50	S.F.	\$
ITEM: 20 - SAFETY CONTROLS FOR CONSTRUCTIO	N OPERATIONS			
THE SUM OF:	DOLL 1DG			
AND		400	D.D.	\$
AND				
(\$) PER	LUMP SUM			
ITEM: 21 – ALLOWANCE FOR MATERIALS TESTING	Ť			
THE SUM OF:				
FIVE HUNDRED		1	ALL.	\$ 500
ANDNO				
(\$	ALLOWANCE			
ITEM: 22 – ALLOWANCE FOR PAYMENT OF POLICE	E OFFICERS			
THE SUM OF: TWO THOUSAND	_ DOLLARS			
AND <u>NO</u>	_ CENTS	1	ALL.	\$ 2,000
(\$) PER	ALLOWANCE			ŕ
ITEM: 23 - MANUFACTURED 'SILT SACK' FOR CAT (SEDIMENTATION CONTROL)	CHBASIN			
THE SUM OF:	DOLLARS			
AND		5	EA.	\$
11112	CLITID	1	1	i l

(\$) PER	EACH			
ITEM: 24 - PROPOSED EROSION CO (SILT FENCE)	ONTROL DEVI	CE			
THE SUM OF:		DOLLARS			
AND		CENTS			
(\$) PER	LINEAR FOOT	1500	L.F.	\$
ITEM: 25 - TREE PROTECTION					
THE SUM OF:		DOLLARS			
AND		CENTS			
(\$) PER	LINEAR FOOT	100	L.F.	\$
ITEM: 26 - DETECTABLE TIL LOCATIONS	E SURFACE I	FOR CURB CUT			
THE SUM OF:		DOLLARS			
AND		CENTS	1	EA.	\$
(\$) PER	EACH			
					<u> </u>

TOTAL BASE BID:	

The Total of all <u>Base Bid</u> items must be inserted in Paragraph "D.1" of the BID FORM.

ALTERNATE BID ITEMS ARE CONTINUED ON NEXT PAGE

ALTERNATE 1:

AND

ITEM DESCRIPTION & BID PRICE

THE SUM OF		T DOLLARS			
AND					
(\$) PER	SQUARE YARD	500	S.Y.	\$
1	The Total for <u>Alternate 1</u> items mus	st be inserted in Para	graph "	D.2" of	the BID FORM.
ALTER	NATE 2: ITEM DESCRIPTION & BID PRICE		EST. QTY	UNIT MEASU	TOTAL JRE COST
THE SUM OF	2 – WATER FOUNTAIN	DOLLARS			

EST.

QTY

UNIT

MEASURE

EA

TOTAL

COST

TOTAL ALTERNATE 2 BID:	

CENTS

EACH

The Total for Alternate 2 items must be inserted in Paragraph "D.3" of the BID FORM.

ALTERNATE 3:

AND___

ITEM DESCRIPTION & BID PRICE		QTY	MEASURE	COST
ITEM: ALT 3 – FURNISH & INSTALL A PARK BENCE	Н			
THE SUM OF:	DOLLARS			
AND	CENTS			
(\$) PER	EACH	8	EA	
TOTAL ALTERNATE 3 The Total for <u>Alternate 3</u> items mus		agraph "	D.4" of the E	SID FORM.
ALTERNATE 4: ITEM DESCRIPTION & BID PRICE		EST. QTY	UNIT MEASURE	TOTAL COST
ITEM: ALT 4 – SHADE STRUCTURE				
THE SUM OF:	DOLLARS			

EST.

UNIT

TOTAL

TOTAL ALTERNATE 4 BID:	

CENTS

EACH

1

EA

_) PER

The Total for Alternate 4 items must be inserted in Paragraph "D.5" of the BID FORM.

END OF BID ITEMS

CITY OF NEWTON

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City of Newton for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

NCORPORATED? Y	E5 NO	DATE AND STA	AIE OF IN	COKPOKATION:	
S YOUR BUSINESS A MBE	??YES	NO WBE ?	YES	NO or MWBE ?	YE
LIST ALL CONTRACTS CUIDATE OFCOMPLETION:	RRENTLY ON I	HAND, SHOWIN	G CONTRA	CT AMOUNT AND A	NTICII
HAVE YOU EVER FAILED TO SEE THE SEE TH		A CONTRACT A	AWARDED	TO YOU?	
HAVE YOU EVER DEFAUL	TED ON A CON	VTRACT?	YES	NO	
LIST YOUR VEHICLES/EQU	JIPMENT AVA	ILABLE FOR TH	IS CONTRA	ACT:	
				G CONTRACTS COM	DI ETE

	DATE COMPLETED:
_YES	
	TELEPHONE #:)
	Γ?:
	(i.e., contract manager, purchasing agent, etc.)
	DATE COMPLETED:
	TELEPHONE #: ()
	Γ?:
LEATION TO TROJECT	(i.e., contract manager, purchasing agent, etc.)
	DATE COMPLETED:
	TELEPHONE #: ()
ELATION TO PROJECT	Γ?: (i.e., contract manager, purchasing agent, etc.)
	DATE COMPLETED:
_YES	NO
 	
	TELEPHONE #:()
	Γ?:
	(i.e., contract manager, purchasing agent, etc.)
	YES

END OF SECTION

10.

CERTIFICATE OF NON-COLLUSION

submitted in good faith and without collusion or fraud with a	s bid or proposal has been made and submitted in good faith and any other person. As used in this certification, the word "person" shall union, committee club, or other organization, entity, or group or
	(Signature of individual)
	Name of Business

City of Newton



Mayor

Purchasing Department

Nicholas Read © Chief Procurement Officer
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing@newtonma.gov

Telephone (617) 796-1220 Fax: (617) 796-1227 TDD/TTY (617) 796-1089

Setti D. Warren	
Date	
Vendor	
Re: Debarment Letter for Invitation For Bid #15-134	
As a potential vendor on the above contract, the City requires that you you are in compliance with the below Federal Executive Order. Certi	
Debarment:	
Federal Executive Order (E.O.) 12549 "Debarment and Suspension awards, using federal funds, and all sub-recipients certify that the suspended, proposed for debarment, declared ineligible, or volunt from doing business with the Federal Government.	e organization and its principals are not debarred,
I hereby certify under pains and penalties of perjury that neither I nor presently debarred, suspended, proposed for debarment, declared ineltransaction by any federal department or agency.	
	(Name
	(Company
	PHONE FAX EMAIL
	Signatur
	Dat
If you have questions, please contact Nicholas Read, Chief Procureme	ent Officer at (617) 796-1220
2 you have questions, preuse contact Prenous read, effet Procurent	Silver at (017) 770 1220.

Form W-9 (Rev. October 2007) Department of the Treasury Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

-					
ם משמח	Business name, if different from above				
Print or type Specific Instructions on page	Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership ☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ► X Exempt payee				
Print Print	Address (number, street, and apt. or suite no.)	Requester's name and a	ddress (optional)		
Phocifi	City, state, and ZIP code				
Q.					
Pa	art I Taxpayer Identification Number (TIN)				
bac	ter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to ckup withholding. For individuals, this is your social security number (SSN). However, for a resic an, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities	dent	rity number		
	r employer identification number (EIN). If you do not have a number, see How to get a TIN on p		or		
	te. If the account is in more than one name, see the chart on page 4 for guidelines on whose mber to enter.	Employer id	lentification number		
Pa	art II Certification		· · · · · · · · · · · · · · · · · · ·		
Unc	der penalties of perjury, I certify that:				
1.	The number shown on this form is my correct taxpayer identification number (or I am waiting f	or a number to be is	sued to me), and		
	I am not subject to backup withholding because: (a) I am exempt from backup withholding, or Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report notified me that I am no longer subject to backup withholding, and				

I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Signature of U.S. person ▶ Date ▶ Name

Cat. No. 10231X

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

• The U.S. owner of a disregarded entity and not the entity,

Form **W-9** (Rev. 10-2007)

CONTRACT FORMS
The awarded bidder will be required to complete and submit documents substantially similar in form to the following.
These forms may need to be modified on account of changed circumstances, and are provided for informational purposes only.

CITY - CONTRACTOR AGREEMENT

CONTRACT NO. C -

NEWTON, a m	unicipal c e CITY, a	de this day of in the year Two Thousand and Fifteen by and between the CITY OF orporation organized and existing under the laws of the Commonwealth of Massachusetts, hereinafter cting through its Chief Procurement Officer, but without personal liability to him, and hereinafter referred		
The parties here	eto for the	considerations hereinafter set forth agree as follows:		
ARTICLE 1.	STATEMENT OF WORK. The Contractor shall furnish all labor, materials, and equipment and perform all work required in strict accordance with the Contract Documents for the following project:			
		RECONSTRUCTION OF THE TENNIS COURTS AT NEWTON SOUTH HIGH SCHOOL		
ARTICLE 2.	TIME OF COMPLETION. The Contractor shall commence work under this Contract on the date specified in the written notice of the City to proceed and shall fully complete all work hereunder within the time specified in the Summary of Work and Specific Work Requirements of the Project Manual. Time is of the essence with regard to this contract, with all work to be completed within sixty (60) calendar days from the date of the Notice To Proceed. Failure to complete within the time specified shall be subject to the assessment of liquidated damages in accordance with the provisions contained in the Project Manual.			
ARTICLE 3.	3. THE CONTRACT PRICE. The City shall pay the Contractor for the full and satisfactory performance of th Contract, in current funds a sum not to exceed:			
		(\$)		
ARTICLE 4.		RACT DOCUMENTS. The Contract Documents consist of the following documents which are either d to this Agreement or are incorporated herein by reference:		
	a.	This CITY-CONTRACTOR Agreement;		
	b.	The City's Invitation For Bid #15-134 issued by the Purchasing Department;		
	c.	The Project Manual for: Reconstruction of Tennis Courts at Newton South High School, including the Instructions to Bidders; General Conditions; Special Conditions; MWBE/AA Requirements, Wage Rate Requirements and Wage Rate Schedule(s) including any updated prevailing wage rate schedules if applicable; The Supplementary Special Conditions; General Requirements and Project Specifications; and Drawings, if included or referenced therein;		
	d.	Addenda Number(s);		
	e.	The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;		
	f.	Certificate(s) of Insurance and surety bond(s) submitted by the CONTRACTOR in connection with this Project;		

g. Duly authorized and executed Amendments, Change Orders or Shipping Orders issued by the CITY after execution of this CITY-CONTRACTOR Agreement.

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR.

ARTICLE 5. ALTERNATES. The following Alternates have been accepted and their costs are included in the Contract Price stated in Article 3 of this Agreement:

Alternates: ______

ARTICLE 6. APPLICABLE STATUTES. All applicable federal, state and local laws and regulations are incorporated herein by reference and the Contractor agrees to comply with same.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under seal the day and year first above written.

CONTRACTOR	CITY OF NEWTON
By	Ву
Print Name	By Chief Procurement Officer
Title	
Date	Date
Affix Corporate Seal Here	By Commissioner of Parks & Recreation
	Commissioner of Parks & Recreation
City funds in the amount of	Date
\$ are	
available in account number	
35A60201 - 586010	Approved as to Legal Form and Character
	By
	By Associate City Solicitor
I further certify that the Mayor, or his	
designee, is authorized to execute contracts	Date
and approve change orders	CONTRACT & DONNE ARE ARROUTED
D ₁₇	CONTRACT & BONDS ARE APPROVED
By	
Compilatel of Accounts	By
Date	By Mayor or his designee
	Date

CERTIFICATE OF AUTHORITY - CORPORATE

1.	I hereby certify that I am the Clerk/Secretary of	
	(ins	ert full name of Corporation)
2.	corporation, and that	
	corporation, and that (insert the name of officer wh	o signed the contract and bonds.)
3.	is the duly elected	
		(insert the title of the officer in line 2)
4.	of said corporation, and that on	
		s ON OR BEFORE the date the
	officer signed the	contract and bonds.)
	at a duly authorized meeting of the Board of Directors of said corp notice, it was voted that	oration, at which all the directors were present or waived
5.	the the	
	(insert name from line 2)	(insert title from line 3)
	of this corporation be and hereby is authorized to execute contection, and affix its Corporate Seal thereto, and such exename and on its behalf, with or without the Corporate Seal, shabove vote has not been amended or rescinded and remains in	cution of any contract of obligation in this corporation's all be valid and binding upon this corporation; and that the
6.	ATTEST:(Signature of Clerk or Secretary)*	AFFIX CORPORATE
	(Signature of Clerk or Secretary)*	SEAL HERE
7.	Name:	
	Name: (Please print or type name in line 6)*	
8.	Date:	
	Date: (insert a date that is <i>ON OR AFTER</i> the date the officer signed the contract and bonds.)	

^{*} The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

Signature of Individual or Corporate Contractor (Mandatory)	* Contractor's Social Security Number (Voluntary) or Federal Identification Number
Print Name:	
By: Corporate Officer (Mandatory, if applicable)	Date:
Print Name:	

^{*} The provision in this Certification relating to child support applies only when the Contractor is an individual.

^{**} Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

^{***} Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CITY OF NEWTON, MASSACHUSETTS

PAYMENT BOND

	By These Presents:		
That w	ž,	, as PRINCIPAL, and	, as
SURETY, are	held and firmly bound unto the City	of Newton as Obligee, in the sum of	
dollars	(\$) to be paid	to the Obligee, for which payments well and truly to be r	nade, we bind ourselves
our respective	heirs, executors, administrators, suc	ccessors and assigns, jointly and severally, firmly by these	e presents.
When	eas, the said PRINCIPAL has made	a contract with the Obligee, bearing the date of	, 2015 for the
construction o	f	in Newton, Massachusetts.	
	(Project Title)		
Now, the	ne condition of this obligation is such	th that if the PRINCIPAL and all Sub-contractors under s	said contract shall well
and truly keep	and perform all the undertakings, co	ovenants, agreements, terms and conditions of said contra	act on its part to be kept
and performed	during the original term of said con	ntract and any extensions thereof that may be granted by t	the Obligee, with or
without notice	to the SURETY, and during the life	e and any guarantee required under the contract, and shall	l also well and truly keep
and perform al	l the undertakings, covenants, agree	ements, terms and conditions of any and all duly authorize	ed modifications,
alterations, cha	anges or additions to said contract th	nat may hereafter be made, notice to the SURETY of such	h modifications,
alterations, cha	anges or additions being hereby waiv	ved, then this obligation shall become null and void; other	erwise, it shall remain in
full force, virtu	ie and effect.		
In the e	vent, that the contract is abandoned	by the PRINCIPAL, or in the event that the Obligee term	ninates the employment
of the PRINCI	PAL or the authority of the PRINCI	IPAL to continue the work said SURETY hereby further	agrees that said
SURETY shal	l, if requested in writing by the Oblig	gee, take such action as is necessary to complete said cor	ntract.
In Witr	ness Whereof, the PRINCIPAL and S	SURETY have hereto set their hands and seals thisd	ay of 2015.
PRINC	<u>IPAL</u>	SURETY	
BY		BY	
	(SEAL)	(ATTORNEY-IN-FACT) (SEAL)
	(Title)		
ATTEST:		ATTEST:	

CITY OF NEWTON GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

1.0 **DEFINITIONS**

1.1 THE CONTRACT DOCUMENTS

The term "Contract Documents" sometimes also referred to as the "Contract", means the contract entered into between the City of Newton (hereinafter "City") and the Contractor. It includes the Invitation for Bid, General Bid Form, Contract Form, these General Conditions of the Contract, Supplements and Amendments to the General Conditions (if any), Contract Specifications, Drawings, all addenda issued prior to execution of the contract, the Bid Bond, the Labor and Material Payment Bond, or other assurances of completion, the applicable wage rate determinations, and other documents listed in the Agreement and modifications issued after execution of the contract.

1.2 THE WORK

The term "Work", sometimes also referred to as the "Project", means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligation.

1.3 OWNER

The term "Owner" is the City of Newton.

1.4 CONTRACT OFFICER

The term "Contract Officer" means the person appointed by the Owner to administer the terms of the Contract between the Owner and the Contractor, who is also empowered to take certain actions under this Agreement.

1.5 CONTRACTOR

- 1.5.1 The Contractor, sometimes referred to as the General Contractor, is the person or entity identified as such throughout the Contract Documents as if singular in number. The term Contractor means the Contractor or its authorized representative.
- 1.5.2 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract.

1.6 SUBSTANTIAL COMPLETION

The term "Substantial Completion" means the value of the work remaining to be performed by the Contractor is, in the estimate of the awarding authority, less than one percent (1%) of the original contract price.

2.0 CONTRACT ADMINISTRATION

2.1 PRE-CONSTRUCTION CONFERENCE

- 2.1.1 Prior to commencement of the Work, the Contractor shall meet in conference with representatives of the Owner regarding the Owner's requirements under the Contract for administration of the quality assurance program, safety program, labor provisions, the schedule of work, and other Contract procedures.
- 2.1.2 The Contractor shall begin work upon receipt of a written Notice to Proceed from the Contract Officer or designee. The Contractor shall not begin work prior to receiving such notice.

2.2 CONTRACT PERIOD

The Contractor shall complete all work required under this contract within the timeframe specified elsewhere in this document, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

2.3 REJECTION OF DEFECTIVE MATERIALS AND WORK

The Owner's inspection of the Work shall not relieve the Contractor of any of its responsibilities to fulfill the Contract obligations, and defective work shall be corrected without cost to the Owner. Unsuitable work may be rejected by the Owner, notwithstanding that such work and materials have been previously overlooked or misjudged by the Owner and accepted for payment. If the Work or any part thereof shall be found defective at any time before the final acceptance of the whole Work, the Contractor shall forthwith correct such defect in a manner satisfactory to the Owner, and if any material brought upon the site for use in the Work, or selected for the same, shall be rejected by the Owner as unsuitable or not in conformity with the Contract requirements, the Contractor shall forthwith remove such materials from the vicinity of the Work.

2.4 CHANGES

2.4.1 All changes in the work including any increase, decrease, or other equitable adjustment in the Contract price or in the time for performing the Contract, shall be authorized in writing by the Owner and/or Contract Officer prior to commencement.

2.5 CONTRACT PRICE

The Contract Price is stated in the Contract Form, and including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

2.6 APPLICATIONS FOR PAYMENT

- 2.6.1 Once each month, on a date established by the Owner at the beginning of the Work, the Contractor shall deliver to the Owner an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Owner may require, and reflecting a minimum of 5% retainage until the final acceptance and payment by the Owner.
- 2.6.2 The Owner shall make payment to the Contractor within 30 days of receipt of said application, less any applicable retainage.
- 2.6.3 The Owner may make changes in any application for payment submitted by the Contractor for:
 - i. Retention based on the value of its claims against the Contractor,
 - ii. Retention of 5% of the approved amount of the Application for Payment.

2.7 FINAL PAYMENT

The acceptance by the Contractor of the last payment due under this Contract or the execution of the Final Certificate of Completion, shall operate as a release to the Owner from all claims and liability related to this Contract.

2.8 GUARANTY AND WARRANTY

2.8.1 WARRANTY

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2.8.2 GENERAL GUARANTY

If at any time during the period of one (1) year from the date of Substantial Completion of the Work to be performed under this Contract, any part of the Work shall, in the reasonable determination of the Owner, require replacing or repairing due to the fact that it is broken, defective, or otherwise does not conform to the Contract Documents, the Owner will notify the Contractor to make

the required repairs or replacement. If the Contractor shall neglect to commence such repairs or replacement to the satisfaction of the Owner within ten (10) days from the date of giving or mailing such notice, then the Owner may employ other persons to make the same. The Contractor agrees, upon demand, to pay to the Owner all amounts which the Owner expends for such repairs or replacements. During this one year guarantee period any corrective work shall be performed in accordance with the applicable terms of this Contract. For items of work completed after use and occupancy has been taken, the one year guarantee shall commence at the time the Owner accepts such items. This one year guarantee shall not limit any express guaranty or warranty provided elsewhere in the Contract.

2.9 INSURANCE REQUIREMENTS

2.9.1 The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

WORKER'S COMPENSATION

Worker's Compensation: Per M.G.L. c.. 149, s. 34 and c.. 152 as amended.

COMMERCIAL GENERAL LIABILITY

Personal Injury \$500,000 each occurrence

\$1,000,000 aggregate

Property Damage \$500,000 each occurrence

\$1,000,000 aggregate

VEHICLE LIABILITY

Personal Injury \$500,000 each person

\$1,000,000 aggregate

Property Damage \$300,000 each occurrence

\$500,000 aggregate

2.9.2 OWNER AS CO-INSURED

The Owner shall be named as additional insureds on the Contractor's Liability Policies.

2.9.3 CERTIFICATES OF INSURANCE, POLICIES

- i. The Contractor shall not commence the work until proof of compliance with this Section 2.9 has been furnished to the Owner by submitting one copy of a properly endorsed insurance certificate issued by a company authorized to write insurance in the Commonwealth. This certificate shall indicate that the contractual liability coverage is in force.
- ii. The Contractor shall file the original and one certified copy of all policies with the Owner within fifteen (15) days after contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to so notify the Owner, then the Contractor shall be responsible for all reasonable costs attributable thereto.

2.9.4 CANCELLATION

Cancellation of any insurance required by this contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and Owner at least thirty days prior to the effective date thereof, which shall be expressed in said notice.

2.10 INDEMNIFICATION

The Contractor shall take all responsibility for the Work and take all precautions for preventing injuries to persons and property in or about the Work; shall bear all losses resulting to or on account of the amount or character of the Work. The Contractor shall pay or cause payment to be made for all labor performed or furnished and for all materials used or employed in carrying out this Contract. The Contractor shall assume the defense of, and indemnify and save harmless the Owner, and the Owner's officers and agents from all claims relating to labor performed or furnished and materials used or employed for the Work; to inventions, patents and patent rights used in and in doing the Work unless such patent infringement is due to a product or process specified by the Owner; to injuries to any person or corporation received or sustained by or from the Contractor and any employees, and

subcontractors and employees, in doing the work, or in consequence of any improper materials, implements or labor used or employed therein; and to any act, omission or neglect of the Contractor and any employees therein.

2.11 BONDS

The Contractor shall provide the Owner with a performance and with a payment or labor and materials bond in the form provided by the Owner, executed by a surety company licensed by the Commonwealth of Massachusetts' Division of Insurance. Such bond shall be in an amount equal to at least one half of the Contract price unless otherwise stated in the Contract Documents. All bonds shall be accompanied by a current power of attorney.

2.12 TERMINATION

2.12.1 TERMINATION FOR CAUSE

- i. The Owner may terminate this contract for cause if it determines that any of the following circumstances have occurred:
 - a. The Contractor is adjudged bankrupt or has made a general assignment for the benefit of its creditors.
 - b. A receiver has been appointed of the Contractor's property.
 - c. All or a part of the Work has been abandoned.
 - d. The Contractor has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Owner, except as provided in the Contract.
 - e. The Owner has determined that the rate of progress required on the project is not being met.
 - f. The Contractor has substantially violated any provisions of this Contract.
- ii. The Owner may complete the Work, or any part thereof, and charge its expense of so completing the Work or part thereof, to the Contractor.
- iii. The Owner may take possession of and use any materials, machinery, implements and tools found upon the site of said Work. The Owner shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the Contractor shall be solely responsible for their removal from the Project site after the Owner has no further use for them.

2.12.2 TERMINATION - NO FAULT

- i. In the event that this Contract is terminated by the Owner, prior to the completion of construction and termination is not based on a reason listed in Paragraph 2.12.1, the Contractor shall be compensated for its costs incurred on the Project, including reasonable costs of de-mobilization, covering the period of time between the last approved application for payment and the date of termination.
- ii. Payment by the Owner pursuant to Section 2.7 shall be considered to fully compensate the Contractor for all claims and expenses and those of any consultants, subcontractors, and suppliers, directly or indirectly attributable to the termination, including any claims for lost profits.

2.13 PERMITS, FEES, AND NOTICES

- 2.13.1 The Contractor shall secure and the Owner shall pay for the building permit, if required. The Contractor shall coordinate all efforts required to obtain this permit. All other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work shall be secured and paid for by the Contractor.
- 2.13.2 The Contractor shall comply with and give notices required by laws, ordinances rules, regulations, and lawful orders of public authorities bearing on performance of the Work.
- 2.13.3 If the Contractor performs Work that it knows or reasonably should know is contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

2.14 SAFETY REQUIREMENTS

2.14.1 The Contractor shall comply with all Federal, State, and local safety laws and regulations applicable to the Work performed under this Contract.

2.15 TEMPORARY HEATING

Not required; do not install Removal & Installation of Gym Flooring in any space which is not heated properly.

2.16 AVAILABILITY AND USE OF UTILITY SERVICES

2.16.1 The City shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the Contract. Unless otherwise provided in the Contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the City or, where the utility is produced by the City, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

2.17 DISPUTES

- 2.17.1 "Claim," as used in this section, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the Contract, unlike a claim relating to the Contract, is a claim that can be resolved under a Contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this section, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- 2.17.2 All disputes arising under or relating to this Contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this section.
- 2.17.3 All claims by the Contractor shall be made in writing and submitted to the Contract Officer for a written decision. A claim by the City against the Contractor shall be subject to a written decision by the Contract Officer.
- 2.17.4 The Contract Officer shall, within thirty (30) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- 2.17.5 The Contract Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the City, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within thirty (30) days after receipt of the Contract Officer's decision.
- 2.17.6 The Contractor shall proceed diligently with performance of this Contract and/or any authorized change thereof, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the Contract and/or any authorized change thereof, and comply with any decision of the Contract Officer.

2.18 LIQUIDATED DAMAGES

2.18.1 If the Contractor fails to complete the Work within the time specified in the contract, or any extension thereof, the Contractor shall pay to the City as liquidated damages, the sum of \$250.00 for each day of delay. Completion dates are specified in the Contract for separate phases of the work, and the amount of liquidated damages shall be assessed on each and every phase which is delayed. In the contect of this paragraph, "delay" means failure to provide installed and complete Removal & Installation of Gym Flooring on the date required by Peabody Construction, who is the Owner's Contractor for the Phase 2 Renovation project at Angier Elementary School. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.

- 2.18.2 If the City terminates the Contractor's right to proceed pursuant to section 2.12.1, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the Work together with any increased costs to the City in completing the Work.
- 2.18.3 If the City does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the Work is completed or accepted.

3.0 SALES TAX EXEMPTION AND OTHER TAXES

- 3.0.1 To the extent that materials and supplies are used or incorporated in the performance of this Contract, the Contractor is considered an exempt purchaser under the Massachusetts Sales Act, Chapter 14 of the Acts of 1966.
- 3.0.2 The Contractor shall be responsible for paying all other taxes and tariffs of any sort, related to the Work.

3.1 PROHIBITION AGAINST LIENS

The Contractor is prohibited from placing a lien on the City's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

3.2 ORDER OF PRECEDENCE

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the Contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

3.3 EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS

The City of Newton shall, until three (3) years after final payment under this Contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this Contract for the purpose of making audit, examination, excerpts, and/or transcriptions.

END OF GENERAL CONDITIONS

CITY OF NEWTON

WAGE RATE REQUIREMENTS

1. GENERAL

- A. This section summarizes the requirements for the payment of wages to laborers and mechanics employed under the Contract.
- **B**. Other duties and requirements of law which may not be specified in this section apply and are inherently a part of the Contract.

2. WAGE RATES

- A. The rate per hour to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers employed on the Work shall not be less than the rate of wages in the attached "Minimum Wage Rates" as determined by the Commissioner of Labor and Industries. This schedule shall continue to be the minimum rate of wages for said employees during the life of this Contract.
- **B.** Keep posted on the site a legible copy of said schedule. Keep on file the wage rates and classifications of labor employed on this Work in order that they may be available for inspection by the Owner, Administrator, or the Architect.
- **C.** Apprentices employed pursuant to this determination of wage rates must be registered and approved by the State Apprenticeship Council wherever rates for journeymen or apprentices are not listed.
- **D.** Pay reserve police officers employed on the Work the prevailing rate of wages paid to regular police officers as required by M.G.L. c149, Sec. 34B, as amended. Such police officers shall be covered by Workmen's Compensation Insurance and Employers Liability Insurance by the Contractor.
- E. The Contractor and all subcontractors shall, on a weekly basis throughout the term of the contract, provide to the City of Newton certified payroll affidavits verifying compliance with M.G.L. c.149, Sec. 27, 27A and 27B. The Contractor is obiligated to provide such records to the City directly on a weekly basis. The City may assess a penalty of \$100 for each day beyond the required submission date that such records are received, which amount shall be deducted from any amounts to the Contractor from the City. In the event of chronic late submissions, the City shall report the same to the Office of the Attorney General.
- **F.** The Contractor and all subcontractors shall provide a Statement of Compliance within 15 days of the completion of its portion of the work. This statement shall be submitted to the Owner on the form found elsewhere in this section.
- **G.** The Contractor shall maintain accurate and complete records, including payroll records, during the Contract term and for three years thereafter.

END OF SECTION



CHARLES D. BAKER

DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT

> As determined by the Director under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

RONALD L. WALKER, II WILLIAM D MCKINNEY

KARYN E. POLITO

City of Newton

Awarding Authority: Contract Number:

#15-134

City/Town: NEWTON

Description of Work:

City of Newton Reconstruction of the Tennis Courts at Newton South High School

Job Location:

140 Brandeis Road

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- · This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. If an apprentice rate is not listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAS, the apprentice must be paid the journeyworker's rate for the trade.
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual undate no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at http://www.mass.gov/dols/pw.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.

Issue Date: 06/17/2015 Wage Request Number: 20150617-033

Classification Construction	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	06/01/2015	\$32.75	\$9.91	\$9.33	\$0.00	\$51.99
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2015	\$32.75	\$10.41	\$9.33	\$0.00	\$52.49
	12/01/2015	\$32.75	\$10.41	\$10.08	\$0.00	\$53.24
•	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
	08/01/2016	\$33.25	\$10.91	\$10.08	\$0.00	\$54.24
	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
3 AXLE) DRIVER - EQUIPMENT	06/01/2015	\$32.82	\$9.91	\$9.33	\$0.00	\$52.06
EAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2015	\$32.82	\$10.41	\$9.33	\$0.00	\$52.56
	12/01/2015	\$32.82	\$10.41	\$10.08	\$0.00	\$53.31
	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
4 & 5 AXLE) DRIVER - EQUIPMENT	06/01/2015	\$32.94	\$9.91	\$9.33	\$0.00	\$52.18
EAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2015	\$32.94	\$10.41	\$9.33	\$0.00	\$52.68
	12/01/2015	\$32.94	\$10.41	\$10.08	\$0.00	\$53.43
	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54,43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
ADS/SUBMERSIBLE PILOT	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
ILE DRIVER LOCAL 56 (ZONE I)	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
AIR TRACK OPERATOR	06/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
ABORERS - ZONE 1	12/01/2015	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	06/01/2016	\$37.35	\$7.30	\$13.20	\$0.00	\$57.85
	12/01/2016	\$38.35	\$7.30	\$13.20	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH, EQUIPT. IEAT & FROST INSULATORS LOCAL 6 (BOSTON)	06/01/2015	\$33.43	\$10.40	\$5.95	\$0.00	\$49.78
21 d 1 lost hisozhiola (cell o posiciy	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER aborers - zone i	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
ABONERS - ZONE I	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"				****		
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.83	\$10.00	\$14.55	\$0.00	\$67.38
	12/01/2015	\$44.08	\$10.00	\$14.55	\$0.00	\$68.63
	06/01/2016	\$44.83	\$10.00	\$14.55	\$0.00	\$69.38
	12/01/2016	\$46,08	\$10.00	\$14.55	\$0.00	\$70.63
	06/01/2017	\$47.08	\$10.00	\$14.55	\$0.00	\$71.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	\$48.08	\$10.00	\$14.55	\$0.00	\$72.63
ACKHOE/FRONT-END LOADER	06/01/2015	\$42.83	\$10.00	\$14.55	\$0.00	\$67.38
PERATING ENGINEERS LOCAL 4	12/01/2015	\$44.08	\$10.00	\$14.55	\$0.00	\$68.63
	06/01/2016	\$44.83	\$10.00	\$14.55	\$0.00	\$69.38
	12/01/2016	\$46.08	\$10.00	\$14.55	\$0.00	\$70.63
	06/01/2017	\$47.08	\$10.00	\$14.55	\$0.00	\$71.63
	12/01/2017	\$48.08	\$10.00	\$14.55	\$0.00	\$72.63
			-			

Classification For apprentice rates see "Apprentice-OPERATING ENGINEERS"	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BARCO-TYPE JUMPING TAMPER	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
LABORERS - ZONE I	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
BLOCK PAVER, RAMMER / CURB SETTER	06/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
LABORERS - ZONE I	12/01/2015	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	06/01/2016	\$37.35	\$7.30	\$13.20	\$0.00	\$57.85
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$38.35	\$7.30	\$13.20	\$0.00	\$58.85
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2010	\$37.70	\$6.97	\$11,18	\$0.00	\$55.85

Appre	ntice - BC	DILERMAKER - Local 29						
	ive Date -	01/01/2010				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	65		\$24.51	\$6.97	\$11.18	\$0,00	\$42.66	
2	65		\$24.51	\$6.97	\$11.18	\$0.00	\$42.66	
3	70		\$26.39	\$6.97	\$11.18	\$0.00	\$44.54	
4	75		\$28.28	\$6.97	\$11.18	\$0.00	\$46.43	
5	80		\$30.16	\$6.97	\$11.18	\$0.00	\$48.31	
6	85		\$32.05	\$6.97	\$11.18	\$0.00	\$50.20	
7	90		\$33.93	\$6.97	\$11.18	\$0.00	\$52.08	
8	95		\$35.82	\$6.97	\$11.18	\$0.00	\$53.97	
Notes	- — — -							
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Appre	ntice to Jos	urneyworker Ratio:1:5						
	FICIAL MA	SONRY (INCL. MASONR	Y 02/01/201:	\$48.96	\$10.18	\$18.50	\$0.00	\$77.64
WATERPROOFING) BRICKLAYERS LOCAL 3 (NI	EWTON)		08/01/201:	\$49,86	\$10.18	\$18.57	\$0.00	\$78.61
,,,,,,	,		02/01/2016	\$50.43	\$10.18	\$18.57	\$0.00	\$79.18
			08/01/2010	\$51.33	\$10.18	\$18.65	\$0.00	\$80.16
			02/01/201	\$51.90	\$10.18	\$18.65	\$0.00	\$80.73

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 Wage Request Number:
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Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Newton

Issue Date: 06/17/2015 Wage Request Number: 20150617-033 Page 4 of 39

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CARBIDE CORE DRILL OPERATOR	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
ABORERS - ZONE 1	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	5 \$7.30	\$13.20	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
CARPENTER	03/01/2015	\$35,75	\$9.80	\$16.48	\$0.00	\$62.03
CARPENTERS -ZONE 2 (Fastern Massachusetts)	00/01/2015	000.70	43100	• • • • • • • • • • • • • • • • • • • •	*	4

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$17.88	\$9.80	\$1.63	\$0.00	\$29.31	
2	60	\$21.45	\$9.80	\$1.63	\$0.00	\$32.88	
3	70	\$25.03	\$9.80	\$11.59	\$0.00	\$46.42	
4	75	\$26.81	\$9.80	\$11.59	\$0.00	\$48.20	
5	80	\$28.60	\$9.80	\$13.22	\$0.00	\$51.62	
6	80	\$28.60	\$9.80	\$13.22	\$0.00	\$51.62	
7	90	\$32.18	\$9.80	\$14.85	\$0.00	\$56.83	
8	90	\$32.18	\$9.80	\$14.85	\$0.00	\$56.83	
Note	s:						
İ						į	
App	rentice to Journeyworker R	tatio:1:5				-	
	Y/PLASTERING	01/01/2015	\$44.90	\$10.90	\$18.71	\$1.30	\$75.81
LAYERS LOCAL 3 (NEWTON)	07/01/2015	\$45.82	\$10.90	\$18,71	\$1.30	\$76.73

01/01/2016

\$46.44 \$10.90 \$18.71

\$1.30

\$77.35

 Issue Date:
 06/17/2015
 Wage Request Number:
 20150617-033
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Pension

Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Newton)

1 50 \$22.45 \$10.90 \$12.21 \$0.00 \$45.36 2 60 \$26.64 \$10.90 \$13.71 \$1.30 \$52.85 3 65 \$29.19 \$10.90 \$14.71 \$1.30 \$55.61 4 70 \$31.43 \$10.90 \$15.71 \$1.30 \$59.94 5 75 \$33.68 \$10.90 \$16.71 \$1.30 \$65.29 6 80 \$35.59 \$10.90 \$17.71 \$1.30 \$65.29 6 80 \$35.59 \$10.90 \$17.71 \$1.30 \$65.83 7 90 \$40.41 \$10.90 \$18.71 \$1.30 \$65.83 1 50 \$22.91 \$10.90 \$12.21 \$0.00 \$46.02 2 60 \$22.49 \$10.90 \$13.71 \$1.30 \$55.40 3 65 \$22.78 \$10.90 \$14.71 \$1.30 \$55.40 4 70 \$32.07 \$10.90 \$13.71 \$1.30 \$55.69 4 70 \$32.07 \$10.90 \$14.71 \$1.30 \$55.69 4 70 \$32.07 \$10.90 \$14.71 \$1.30 \$55.69 4 70 \$32.07 \$10.90 \$14.71 \$1.30 \$55.69 5 75 \$34.37 \$10.90 \$16.71 \$1.30 \$55.69 6 80 \$36.66 \$10.90 \$17.71 \$1.30 \$55.69 6 80 \$36.66 \$10.90 \$15.71 \$1.30 \$55.69 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$55.215 Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. ABOUREST 2008 \$1.70 \$1.30 \$10.00 \$15.71 1.10 \$1.30 \$10.90		Effecti Step	ve Date - percent	01/01/2015	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
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3 65 S29.19 S10.90 S14.71 S1.30 S56.10		2								
4 70 S31.43 S10.90 S15.71 S1.30 S59.34 5 75 S33.68 S10.90 S16.71 S1.30 S62.59 6 80 S35.92 S10.90 S17.71 S1.30 S62.59 7 90 S40.41 S10.90 S18.71 S1.30 S67.33 Effective Date - 07/01/2015 Sayperencent Step percent Apprentice Base Wage Health Pension Unemployment Total Rate 1 50 S22.91 S10.90 S12.21 S0.00 S46.02 2 60 S77.49 S10.90 S13.71 S1.30 S53.40 3 65 S29.78 S10.90 S13.71 S1.30 S53.40 3 65 S29.78 S10.90 S15.71 S1.30 S59.89 4 70 S32.07 S10.90 S15.71 S1.30 S59.98 5 75 S34.37 S10.90 S16.71 S1.30 S63.28 6 80 S36.66 S10.90 S17.71 S1.30 S65.37 7 90 S41.24 S10.90 S18.71 S1.30 S65.27 Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs. Notes: Steps 3,4 are 500 hrs. All other st		3								
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Step percent Apprentice Base Wage Health Pension Usunghorman Total Rate		7		•						
Step percent Apprentice Base Wage Health Pension Unemployment Total Rate		Effecti	ve Date -	07/01/2015				Supplemental		
2 60 \$27.49 \$10.90 \$13.71 \$1.30 \$33.40 \$33.40 \$3 65 \$29.78 \$10.90 \$13.71 \$1.30 \$33.40 \$36.69 \$4 70 \$32.07 \$10.90 \$15.71 \$1.30 \$56.69 \$4 70 \$32.07 \$10.90 \$15.71 \$1.30 \$59.98 \$5 75 \$34.37 \$10.90 \$16.71 \$1.30 \$63.28 \$6 80 \$36.66 \$10.90 \$17.71 \$1.30 \$66.57 \$7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$72.15 \$		Step	percent		Apprentice Base Wage	Health	Pension		Total Rate	
3 65 \$29.78 \$10.90 \$14.71 \$1.30 \$56.69 4 70 \$32.07 \$10.90 \$15.71 \$1.30 \$59.98 5 75 75 \$34.37 \$10.90 \$15.71 \$1.30 \$63.28 6 80 \$36.66 \$10.90 \$17.71 \$1.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$65.25 \$1.20 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$1		1	50		\$22.91	\$10.90	\$12.21	\$0.00	\$46.02	
4 70 \$32.07 \$10.90 \$15.71 \$1.30 \$59.98 \$ 5 75 \$34.37 \$10.90 \$16.71 \$1.30 \$63.28 \$ 6 80 \$36.66 \$10.90 \$17.71 \$1.30 \$66.57 \$ 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 \$		2	60		\$27.49	\$10.90	\$13.71	\$1.30	\$53.40	
5 75 \$34.37 \$10.90 \$16.71 \$1.30 \$63.28 \$66.57 \$7 90 \$41.24 \$10.90 \$17.71 \$1.30 \$66.57 \$7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 \$7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 \$7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$72.15 \$81.30 \$82.15 \$81.30 \$82.15 \$81.30 \$82.15 \$81.30 \$82.15 \$81.30 \$82.15 \$82.15 \$81.30 \$82.15		3	65		\$29.78	\$10.90	\$14.71	\$1.30	\$56.69	
6 80 \$36.66 \$10.90 \$17.71 \$13.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$66.57 7 90 \$41.24 \$10.90 \$18.71 \$1.30 \$572.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$72.15 \$1.30 \$13.20 \$72.15 \$1.30 \$11.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35 \$1.30 \$1.30 \$11.35		4	70		\$32.07	\$10.90	\$15.71	\$1.30	\$59.98	
Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.		5	75		\$34.37	\$10.90	\$16.71	\$1.30	\$63.28	
Notes: Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.		6	80		\$36.66	\$10.90	\$17.71	\$1.30	\$66.57	
Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.		7	90		\$41.24	\$10.90	\$18.71	\$1.30	\$72.15	
12/01/2015 \$36.10 \$7.30 \$13.20 \$0.00 \$56.60		Appre			re 1,000 hrs.					
12/01/2015 \$36.10 \$7.30 \$13.20 \$0.00 \$56.60			OR		06/01/2015	\$35.3	5 \$7.30	\$13.20	\$0.00	\$55.85
12/01/2016 \$37.85 \$7.30 \$13.20 \$0.00 \$58.35	OKEKS - ZOM	e 1			12/01/2015	\$36.1	0 \$7.30	\$13.20	\$0.00	\$56.60
For apprentice rates see "Apprentice- LABORER" AM SHELLS/SLURRY BUCKETS/HEADING MACHINES 12/01/2015 \$43.83 \$10.00 \$14.55 \$0.00 \$68.38 12/01/2016 \$45.08 \$10.00 \$14.55 \$0.00 \$69.63 12/01/2016 \$47.08 \$10.00 \$14.55 \$0.00 \$70.38 12/01/2016 \$47.08 \$10.00 \$14.55 \$0.00 \$71.63 12/01/2017 \$48.08 \$10.00 \$14.55 \$0.00 \$72.63 12/01/2017 \$49.08 \$10.00 \$14.55 \$0.00 \$73.63 12/01/2017 \$49.08 \$10.00 \$14.55 \$0.00 \$73.63 12/01/2015 \$29.61 \$10.00 \$14.55 \$0.00 \$54.16 12/01/2015 \$30.48 \$10.00 \$14.55 \$0.00 \$55.03 12/01/2016 \$31.00 \$10.00 \$14.55 \$0.00 \$55.53 12/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$55.53 12/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$55.73 12/01/2017 \$32.56 \$10.00 \$14.55 \$0.00 \$57.80 For apprentice rates see "Apprentice- OPERATING ENGINEERS"					06/01/2016	\$36.8	5 \$7.30	\$13.20	\$0.00	\$57.35
12/01/2015 \$45.08 \$10.00 \$14.55 \$0.00 \$69.63	For apprentice	rates see *	Apprentice- I	LABORER"	12/01/2016	\$37.8	5 \$7.30	\$13.20	\$0.00	\$58.35
12/01/2015 \$45.08 \$10.00 \$14.55 \$0.00 \$69.63	AM SHELL	S/SLUR	RY BUCK	ETS/HEADING MACHINI	S 06/01/2015	5 \$43.8	3 \$10.00	\$14.55	\$0.00	\$68.38
12/01/2016 \$47.08 \$10.00 \$14.55 \$0.00 \$71.63	ERATING ENG	INEERS LO	OCAL 4					\$14.55	\$0.00	\$69.63
06/01/2017 \$48.08 \$10.00 \$14.55 \$0.00 \$72.63					06/01/2016	\$45.8	3 \$10.00	\$14.55	\$0.00	\$70.38
12/01/2017 \$49.08 \$10.00 \$14.55 \$0.00 \$73.63					12/01/2016	5 \$47.0	8 \$10.00	\$14.55	\$0.00	\$71.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS" MPRESSOR OPERATOR ### 12/01/2015 ### 30.48 ### 10.00 ### \$14.55 ### \$0.00 ### \$55.55 ### 12/01/2016 ### 31.00 ### \$10.00 ### \$14.55 ### \$0.00 ### \$55.55 ### \$10.00 ### \$14.55 ### \$10.00 #					06/01/2017	7 \$48.0	8 \$10.00	\$14.55	\$0.00	\$72.63
MPRESSOR OPERATOR ### 12/01/2015 \$29.61 \$10.00 \$14.55 \$0.00 \$54.16 ### 12/01/2015 \$30.48 \$10.00 \$14.55 \$0.00 \$55.03 ### 06/01/2016 \$31.00 \$10.00 \$14.55 \$0.00 \$55.03 ### 06/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$55.55 ### 12/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$56.42 ### 06/01/2017 \$32.56 \$10.00 \$14.55 \$0.00 \$57.11 ### 12/01/2017 \$33.25 \$10.00 \$14.55 \$0.00 \$57.80 ### For apprentice rates see "Apprentice-OPERATING ENGINEERS"	P			Open Lenko estoracene	12/01/2017	7 \$49.0	8 \$10.00	\$14.55	\$0.00	\$73.63
12/01/2015 \$30.48 \$10.00 \$14.55 \$0.00 \$55.03 \$06/01/2016 \$31.00 \$10.00 \$14.55 \$0.00 \$55.53 \$06/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$55.55 \$0.00 \$55.55 \$0.00 \$10.00				JPEKATING ENGINEERS"	0.0101001	£ 630 (1 610.00	\$14.55	\$0.00	05.1.16
06/01/2016 \$31.00 \$10.00 \$14.55 \$0.00 \$55.55 12/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$56.42 06/01/2017 \$32.56 \$10.00 \$14.55 \$0.00 \$57.11 12/01/2017 \$33.25 \$10.00 \$14.55 \$0.00 \$57.80 For apprentice rates see "Apprentice-OPERATING ENGINEERS"										
12/01/2016 \$31.87 \$10.00 \$14.55 \$0.00 \$56.42 06/01/2017 \$32.56 \$10.00 \$14.55 \$0.00 \$57.11 12/01/2017 \$33.25 \$10.00 \$14.55 \$0.00 \$57.80 For apprentice rates see "Apprentice-OPERATING ENGINEERS"										
06/01/2017 \$32.56 \$10.00 \$14.55 \$0.00 \$57.11 12/01/2017 \$33.25 \$10.00 \$14.55 \$0.00 \$57.80 For apprentice rates see "Apprentice-OPERATING ENGINEERS"										
12/01/2017 \$33.25 \$10.00 \$14.55 \$0.00 \$57.80 For apprentice rates see "Apprentice-OPERATING ENGINEERS"										
For apprentice rates see "Apprentice- OPERATING ENGINEERS"										
ne Date: 06/17/2015 Wage Request Number: 20150617-033 Page 6	For apprentice	rates see "	Apprentice- (OPERATING ENGINEERS*	12/01/2017	\$33.2	5 \$10.00	\$14,33	.30.00	337.8U
ne Date: 06/17/2015 Wage Request Number: 20150617-033 Page 6										
	ne Date: (06/17/20	15	Wage Reque	st Number: 201506	17-033			!	Page 6 of

Classification			Effective Dat	te Base Wage	: Health	Pension	Supplemental Unemployment	Total Rate
ELEADER (B			01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
AINTERS LOCAL	33 - ZONI	E 2	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
			01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
			07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
			01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36
		D UNTER Land 25 PRINC	PEC/TAMPC					
		ntice - PAINTER Local 35 - BRIDC ive Date - 01/01/2015	IES/IAINAS				_	
	Step	percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen	ı t Total Rate	
	1	50	\$23.83	\$7.85	\$0.00	\$0.00	\$31.68	
	2	55	\$26.21	\$7.85	\$3,66	\$0.00		
	3	60	\$28.60	\$7.85	\$3.99	\$0.00		
	4	65	\$30.98	\$7.85	\$4.32	\$0.00		
	5	70	\$33.36	\$7.85	\$14.11	\$0.00		
	6	75	\$35.75	\$7.85	\$14.44	\$0.00		
	7	80	\$38.13	\$7.85	\$14.77	\$0.00		
	8	90	\$42.89	\$7.85	\$15.44	\$0.00		
	•	70	342.07	47.65	315.44	40.00	. 500.10	
	Effecti Step	ve Date - 07/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
	1	50	\$24.28	\$7.85	\$0.00	\$0.00		
	2	55	\$26.71	\$7.85		\$0.00		
	3	60	\$29.14	\$7.85	\$3.66 \$3.99	\$0.00		
	4	65	\$31.56	\$7.85	\$4.32	\$0.00		
	5	70	\$33.99	\$7.85	\$14.11	\$0.00		
	6	75	\$36.42	\$7.85	\$14.44	\$0.00		
	7	80	\$38,85	\$7.85	\$14.77	\$0.00		
	8	90	\$43.70	\$7.85	\$15,44	\$0.00		
	Notes:							
		Steps are 750 hrs.					i	
	Appre	ntice to Journeyworker Ratio:1:1						
EMO: ADZEN			06/01/2015	\$35.25	\$7.30	\$13.20	\$0.00	\$55.75
BORERS - ZONE For apprentice:		'Apprentice- LABORER"	12/01/2015	\$36.00	\$7.30	\$13.20	\$0.00	\$56.50
EMO: BACKI	HOE/LO	DADER/HAMMER OPERATOR	06/01/2015	\$36,25	\$7.30	\$13.20	\$0.00	\$56.75
BORERS - ZONE	1		12/01/2015		\$7.30	\$13.20	\$0.00	\$57.50
For apprentice	rates see "	'Apprentice- LABORER"	1 0 1, 4010	25,.00	-,,50		·	
EMO; BURNI			06/01/2015	\$36.00	\$7.30	\$13.20	\$0.00	\$56.50
BORERS - ZONE			12/01/2015	\$36.75	\$7.30	\$13.20	\$0.00	\$57.25
For apprentice:	rates see "	'Apprentice- LABORER"						
						\$13.20	60.00	\$56.75
		CUTTER/SAWYER	06/01/2015	\$36.25	\$7.30	\$15.20	\$0.00	330.13

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: JACKHAMMER OPERATOR	06/01/2015	\$36.00	\$7.30	\$13.20	\$0.00	\$56.50
LABORERS - ZONE I	12/01/2015	\$36.75	\$7.30	\$13.20	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER LABORERS - ZONE I	. 06/01/2015	\$35.25	\$7.30	\$13.20	\$0.00	\$55.75
	12/01/2015	\$36.00	\$7.30	\$13.20	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR	06/01/2015	\$42.42	\$10.00	\$14.55	\$0.00	\$66.97
OPERATING ENGINEERS LOCAL 4	12/01/2015	\$43.66	\$10.00	\$14.55	\$0.00	\$68.21
	06/01/2016	\$44.41	\$10.00	\$14.55	\$0.00	\$68.96
•	12/01/2016	\$45.64	\$10.00	\$14.55	\$0.00	\$70.19
	06/01/2017	\$46.63	\$10.00	\$14.55	\$0.00	\$71.18
	12/01/2017	\$47.62	\$10.00	\$14.55	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS*						
DIVER	08/01/2014	\$58.24	\$9.80	\$18.17	\$0.00	\$86.21
PILE DRIVER LOCAL 36 (ZONE 1)	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
DIVER TENDER	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
DIVER TENDER (EFFLUENT)	08/01/2014	\$62.40	\$9.80	\$18.17	\$0.00	\$90.37
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
DIVER/SLURRY (EFFLUENT)	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
DRAWBRIDGE OPERATOR (Construction)	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
ELECTRICIANS LOCAL 103	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"		•	•			•
ELECTRICIAN	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
ELECTRICIANS LOCAL 103	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54

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Step	five Date - 03/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61	
2	40	\$18.07	\$13.00	\$0.54	\$0.00	\$31.61	
3	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97	
4	45	\$20.33	\$13.00	\$11.64	\$0.00	\$44.97	
5	50	\$22.59	\$13.00	\$11.98	\$0.00	\$47.57	
6	55	\$24.84	\$13.00	\$12.33	\$0.00	\$50.17	
7	60	\$27.10	\$13.00	\$12.66	\$0.00	\$52.76	
8	65	\$29.36	\$13.00	\$13.01	\$0.00	\$55.37	
9	70	\$31.62	\$13.00	\$13.35	\$0.00	\$57.97	
10	75	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58	
Effect	tive Date - 09/01/2015				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	40	\$18.45	\$13.00	\$0.55	\$0.00	\$32.00	
2	40	\$18.45	\$13.00	\$0.55	\$0.00	\$32.00	
3	45	\$20.76	\$13.00	\$11.65	\$0.00	\$45.41	
4	45	\$20.76	\$13.00	\$11.65	\$0.00	\$45.41	
5	50	\$23.07	\$13.00	\$11.99	\$0.00	\$48.06	
6	55	\$25.37	\$13.00	\$12.34	\$0.00	\$50.71	
7	60	\$27.68	\$13.00	\$12.68	\$0.00	\$53.36	
8	65	\$29.98	\$13.00	\$13.03	\$0.00	\$56.01	
9	70	\$32.29	\$13.00	\$13.37	\$0.00	\$58.66	
10	75	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32	
Notes			— — — -				
ĺ	App Prior 1/1/03; 30/3	5/40/45/50/55/65/70/75/80				İ	
	entice to Journeyworker	Ratio:2:3***					
OR CONSTR		01/01/2015	\$53.30	\$13.58	\$14.21	\$0.00	\$81.0
		01/01/2016	\$54.53	\$14,43	\$14.96	\$0.00	\$83.9

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	Step	ve Date - percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$26.65	\$13.58	\$0.00	\$0.00	\$40.23	
	2	55		\$29.32	\$13.58	\$14.21	\$0.00	\$57.11	
	3	65		\$34.65	\$13.58	\$14.21	\$0.00	\$62.44	
	4	70		\$37.31	\$13.58	\$14.21	\$0.00	\$65.10	
	5	80		\$42.64	\$13.58	\$14.21	\$0.00	\$70.43	
	Effecti	ve Date -	01/01/2016				Supplemental	.*	
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$27.27	\$14.43	\$0.00	\$0.00	\$41.70	
	2	55		\$29.99	\$14.43	\$14.96	\$0.00	\$59.38	
	3	65	•	\$35.44	\$14.43	\$14.96	\$0.00	\$64.83	
	4	70		\$38.17	\$14.43	\$14.96	\$0.00	\$67.56	
	5	80		\$43.62	\$14.43	\$14.96	\$0.00	\$73.01	
	Notes:	. — — -							
		Steps 1-2	are 6 mos.; Steps 3-5 are I	year					
			urneyworker Ratio:1:1						
EVATOR (VATOR CON		UCTOR HI S <i>local 4</i>	ELPER	01/01/201:	5 \$37.31	\$13.58	\$14.21	\$0.00	\$65.10
				01/01/201	5 \$38.17	\$14.43	\$14.96	\$0.00	\$67.56
For appropri	an rotas can "	Appropries 1	ELEVATOR CONSTRUCTOR"	01/01/201	7 \$39.10	\$15.28	\$15.71	\$0.00	\$70.09
		IL ERECT		06/01/201	ene ne	67.10	\$13.20 •	\$0.00	655.05
ORERS - ZOI				06/01/201: 12/01/201:		\$7.30 \$7.30	\$13.20	\$0.00	\$55.85 \$56.60
				06/01/201		\$7.30	\$13,20	\$0.00	\$57.35
				12/01/201		\$7.30	\$13.20	\$0.00	\$58.35
For apprentic	ce rates see "	Apprentice- L	ABORER"	12/01/201	931.63	φ7.50	Q15,20	30.00	950.55
			G,SITE,HVY/HWY	05/01/201:	\$40.22	\$10.00	\$14.30	\$0.00	\$64,52
RATING EN	SINEERS LO	XCAL 4		11/01/201:	\$40.80	\$10.00	\$14.30	\$0.00	\$65.10
				05/01/201	\$41.69	\$10.00	\$14.30	\$0.00	\$65.99
				11/01/2016	\$42.28	\$10.00	\$14.30	\$0.00	\$66.58
				05/01/201	7 \$43.16	\$10.00	\$14.30	\$0.00	\$67.46
				11/01/201	7 \$43.89	\$10.00	\$14.30	\$0.00	\$68.19
For apprentic	ce rates see "	Apprentice- C	PERATING ENGINEERS"	05/01/201	\$44.60	\$10.00	\$14.30	\$0.00	\$68.90
LD ENG.I	PARTY C	HIEF-BLD	G,SITE,HVY/HWY	05/01/201:	5 \$41.65	\$10.00	\$14.30	\$0.00	\$65.95
RATING EN	GINEERS LO	OCAL 4		11/01/201:		\$10.00	\$14.30	\$0.00	\$66.54
				05/01/2010		\$10.00	\$14.30	\$0.00	\$67.43
				11/01/2010		\$10.00	\$14.30	\$0.00	\$68.03
				05/01/201		\$10.00	\$14.30	\$0.00	\$68.92
				11/01/201	7 \$45.35	\$10.00	\$14.30	\$0.00	\$69.65
			PERATING ENGINEERS"	05/01/2013	\$46.07	\$10.00	\$14.30	\$0.00	\$70.37

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	05/01/2015	\$21.68	\$10.00	\$14.30	\$0.00	\$45.98
OPERATING ENGINEERS LOCAL 4	11/01/2015	\$22.02	\$10.00	\$14.30	\$0.00	\$46.32
	05/01/2016	\$22.54	\$10.00	\$14.30	\$0.00	\$46.84
	11/01/2016	\$22.89	\$10.00	\$14.30	\$0.00	\$47.19
	05/01/2017	\$23.42	\$10.00	\$14.30	\$0.00	\$47.72
	11/01/2017	\$23.84	\$10.00	\$14.30	\$0.00	\$48.14
	05/01/2018	\$24.27	\$10.00	\$14.30	\$0.00	\$48.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER ELECTRICIANS LOCAL 103	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73.57
SLECTRICIANS LOCAL 103	09/01/2015	\$46.13	\$13.00	\$15.43	\$0.00	\$74.56
	03/01/2016	\$47.08	\$13.00	\$15.46	\$0.00	\$75.54
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60,58
/ COMMISSIONING ELECTRICIANS	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) OPERATING ENGINEERS LOCAL 4	06/01/2015	\$35.64	\$10.00	\$14.55	\$0.00	\$60.19
TENTING ENGINEENW LOCAL T	12/01/2015	\$36.69	\$10.00	\$14.55	\$0.00	\$61.24
	06/01/2016	\$37.31	\$10.00	\$14.55	\$0.00	\$61.86
	12/01/2016	\$38.35	\$10.00	\$14.55	\$0.00	\$62.90
	06/01/2017	\$39.19	\$10.00	\$14.55	\$0.00	\$63.74
	12/01/2017	\$40.02	\$10.00	\$14.55	\$0.00	\$64.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER aborers - zone i	06/01/2015	\$20.50	\$7.30	\$13.20	\$0.00	\$41.00
MOUDIU - SOME I	12/01/2015	\$20.50	\$7.30	\$13.20	\$0.00	\$41.00
	06/01/2016	\$20.50	\$7.30	\$13.20	\$0.00	\$41.00
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$20.50	\$7.30	\$13.20	\$0.00	\$41.00
FLOORCOVERER FLOORCOVERERS LOCAL 2168 ZONE 1	09/01/2014	\$40.40	\$9.80	\$17.21	\$0.00	\$67.41

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	Step	ve Date - 09/0 percent	1/2014	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$20.20	\$9.80	\$1.79	\$0.00	\$31.79	
	2	55		\$22,22	\$9.80	\$1.79	\$0.00	\$33.81	
	3	60		\$24.24	\$9.80	\$11.84	\$0.00	\$45.88	
	4	65		\$26.26	\$9.80	\$11.84	\$0.00	\$47.90	
	5	70		\$28.28	\$9.80	\$13.63	\$0.00	\$51.71	
	6	75		\$30.30	\$9.80	\$13.63	\$0.00	\$53.73	
	7	80		\$32.32	\$9.80	\$15.42	\$0.00	\$57.54	
	8	85		\$34.34	\$9.80	\$15.42	\$0.00	\$59.56	
Ī	Notes:								
		Steps are 750 h	- — — — — -					i	
			worker Ratio:1:1					***************************************	
RK LIFT/CHI				06/01/201:	\$42.83	\$10.00	\$14.55	\$0.00	\$67.38
AVITING ENGIN	LEIUE	7C7EL 4		12/01/201	\$44.08	\$10.00	\$14.55	\$0.00	\$68.63
				06/01/2016	\$44.83	\$10.00	\$14,55	\$0.00	\$69.38
				12/01/2016	\$46.08	\$10.00	\$14.55	\$0.00	\$70.63
				06/01/2013	\$47.08	\$10.00	\$14.55	\$0.00	\$71.63
				12/01/2017	\$48.08	\$10.00	\$14,55	\$0.00	\$72.63
		Apprentice- OPERAT							
NERATOR/L <i>Rating engin</i>		NG PLANT/HE/ X/AL4	ATERS	06/01/2013	\$29.61	\$10.00	\$14.55	\$0.00	\$54.16
				12/01/2015	\$30.48	\$10.00	\$14.55	\$0.00	\$55.03
				06/01/2016	\$31.00	\$10.00	\$14.55	\$0.00	\$55.55
				12/01/2016	\$31.87	\$10.00	\$14.55	\$0.00	\$56.42
				06/01/2017	\$32.56	\$10.00	\$14.55	\$0.00	\$57.11
				12/01/2013	\$33.25	\$10.00	\$14.55	\$0.00	\$57.80
		Apprentice- OPERAT							
AZIER (GLA: STEMS)	SS PLA	ANK/AIR BARR	LER/INTERIOR	01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
S I EIVIS) ZIERS LOCAL 3:	S (ZONE	2)		07/01/2015	\$38.06	\$7.85	\$16.10	\$0.00	\$62.01
	. –	•		01/01/2016	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
				07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
				01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

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Step	tive Date - 01/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$18.58	\$7.85	\$0.00	\$0.00	\$26.43	
2	55	\$20.44	\$7.85	\$3.66	\$0.00	\$31.95	
3	60	\$22.30	\$7.85	\$3.99	\$0.00	\$34.14	
4	65	\$24.15	\$7.85	\$4.32	\$0.00	\$36.32	
5	70	\$26.01	\$7.85	\$14.11	\$0.00	\$47.97	
6	75	\$27.87	\$7.85	\$14.44	\$0.00	\$50.16	
7	80	\$29.73	\$7.85	\$14.77	\$0.00	\$52.35	
8	90	\$33.44	\$7.85	\$15.44	\$0.00	\$56.73	
Effec	tive Date - 07/01/2015				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$19.03	\$7.85	\$0.00	\$0.00	\$26.88	
2	55	\$20.93	\$7.85	\$3.66	\$0.00	\$32.44	
3	60	\$22.84	\$7.85	\$3.99	\$0.00	\$34.68	
4	65	\$24.74	\$7.85	\$4.32	\$0.00	\$36.91	
5	70	\$26.64	\$7.85	\$14.11	\$0.00	\$48.60	
6	75	\$28.55	\$7.85	\$14.44	\$0.00	\$50.84	
7	80	\$30.45	\$7.85	\$14.77	\$0.00	\$53.07	
8	90	\$34.25	\$7.85	\$15.44	\$0.00	\$57.54	
Notes	Steps are 750 hrs.					,	
Appı	entice to Journeyworker Ratio:1:1					'	
• • •	ER/CRANES/GRADALLS	06/01/201:	5 \$42.83	\$10.00	\$14.55	\$0.00	\$67.3
NG ENGINEERS		12/01/2015			\$14.55	\$0.00	\$68.6
		06/01/2010			\$14.55	\$0.00	\$69.3
		12/01/2010			\$14.55	\$0.00	\$70.6
		06/01/2013			\$14.55	\$0.00	\$71.6
		00/01/201	, 947.0g	\$10.00	φ14.JJ	90.00	311 .

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	Step	ive Date - 06/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	55	\$23.56	\$10.00	\$0.00	\$0.00	\$33.56	
	2	60	\$25.70	\$10.00	\$14.55	\$0.00	\$50.25	
	3	65	\$27.84	\$10.00	\$14.55	\$0.00	\$52.39	
	4	70	\$29.98	\$10.00	\$14,55	\$0.00	\$54.53	
	5	75	\$32.12	\$10.00	\$14.55	\$0.00	\$56.67	
	6	80	\$34.26	\$10.00	\$14.55	\$0.00	\$58.81	
	7	85	\$36.41	\$10.00	\$14.55	\$0.00	\$60.96	
•	8	90	- \$38.55	\$10.00	\$14.55	\$0.00	\$63.10	
	Effect	ive Date - 12/01/2015				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	55	\$24.24	\$10.00	\$0.00	\$0.00	\$34.24	
	2	60	\$26.45	\$10.00	\$14.55	\$0.00	\$51.00	
	3	65	\$28.65	\$10.00	\$14.55	\$0.00	\$53.20	
	4	70	\$30.86	\$10.00	\$14.55	\$0.00	\$55.41	
	5	75	\$33.06	\$10.00	\$14.55	\$0.00	\$57.61	
	6	80	\$35.26	\$10.00	\$14.55	\$0.00	\$59.81	
	7	85	\$37.47	\$10.00	\$14.55	\$0.00	\$62.02	
	8	90	\$39.67	\$10.00	\$14.55	\$0.00	\$64.22	
	Notes:		 					
	1						1	
		ntice to Journeyworker Ratio:1:6						
C (DUCT			02/01/2015	\$43.28	\$10.20	\$20.54	\$2.22	\$76.24
marne ne	AULIE E	CALIT-A	08/01/2015	\$44.28	\$10.20	\$20.54	\$2.22	\$77.24
			02/01/2016	\$45.28	\$10.20	\$20.54	\$2.22	\$78.24
			08/01/2016	\$46.43	\$10.20	\$20.54	\$2,22	\$79.39
			02/01/2017	\$47.53	\$10.20	\$20.54	\$2.22	\$80.49
			08/01/2017	\$48.63	\$10.20	\$20.54	\$2.22	\$81.59
or apprentice	rates see '	Apprentice- SHEET METAL WORKER"	02/01/2018	\$49.78	\$10.20	\$20.54	\$2.22	\$82.74
C (ELEC	FRICAL	CONTROLS)	03/01/2015	\$45.17	\$13.00	\$15.40	\$0.00	\$73,57
RICIANS L	OCAL 103		09/01/2015		\$13.00	\$15,43	\$0.00	\$74.56
			03/01/2016		\$13.00	\$15.46	\$0.00	\$75.54

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR)	02/01/2015	\$43.28	\$10.20	\$20.54	\$2.22	\$76.24
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2015	\$44.28	\$10.20	\$20.54	\$2.22	\$77.24
	02/01/2016	\$45.28	\$10.20	\$20.54	\$2.22	\$78.24
	08/01/2016	\$46.43	\$10.20	\$20.54	\$2.22	\$79.39
	02/01/2017	\$47.53	\$10.20	\$20.54	\$2.22	\$80.49
	08/01/2017	\$48.63	\$10.20	\$20.54	\$2.22	\$81.59
For apprentice rates see "Apprentice-SHEET METAL WORKER"	02/01/2018	\$49.78	\$10.20	\$20.54	\$2.22	\$82.74
HVAC (TESTING AND BALANCING -WATER)	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
PIPEFITTERS LOCAL 537	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28
For apprentice rates see "Apprentice-PIPEFITTER" or "PLUMBER/PIPEFITTER"	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
HVAC MECHANIC	03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
PIPEFITTERS LOCAL 537	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
	03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
	09/01/2016	\$50.69 \$51.69	\$9.70	\$16.89	\$0.00	\$77.28
	03/01/2017	\$52.69	\$9.70	\$16.89	\$0.00	\$79.28
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS LABORERS - ZONE I	06/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
	12/01/2015	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	06/01/2016	\$37.35	\$7.30	\$13.20	\$0.00	\$57.85
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$38.35	\$7.30	\$13.20	\$0.00	\$58.85
INSULATOR (PIPES & TANKS) heat & frost insulators local 6 (boston)	09/01/2014	\$43.31	\$11.25	\$12.60	\$0.00	\$67.16

Apprentice -	ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston	
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Effecti Step	ve Date - 09/01/2014 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$21.66	\$11.25	\$9.35	\$0.00	\$42.26	
2	60	\$25.99	\$11.25	\$10.00	\$0.00	\$47.24	
3	70	\$30.32	\$11.25	\$10.65	\$0.00	\$52.22	
4	80	\$34.65	\$11.25	\$11.30	\$0.00	\$57.20	
Notes:					·		
*	Steps are 1 year					-	
Appre	ntice to Journeyworker Ratio:1:4						
ONWORKER/WELI		03/16/201:	5 \$42.	11 \$7.70	\$20.25	\$0.00	\$70.06

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	Effecti Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	i	60	\$25.27	\$7.70	\$20.25	\$0.00	\$53.22	
	2	70	\$29.48	\$7.70	\$20.25	\$0.00	\$57.43	
	3	75	\$31.58	\$7.70	\$20.25	\$0.00	\$59.53	
	4	80	\$33.69	\$7.70	\$20.25	\$0.00	\$61.64	
	5	85	\$35.79	\$7.70	\$20.25	\$0.00	\$63.74	
	6	90	\$37.90	\$7.70	\$20.25	\$0.00	\$65.85	
	Notes:							
	į	** Structural 1:6; Ornamental I:4					1	
	Appre	ntice to Journeyworker Ratio;**						
		VING BREAKER OPERATOR	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
ABORERS - ZONE	E I		12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
			06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
For apprentice	rates see "	Apprentice- LABORER"	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
ABORER			06/01/2015	\$35,10	\$7.30	\$13.20	\$0.00	\$55.60
ABORERS - ZONE	t I			00000	67 20	\$13.20	\$0.00	\$56.35
			12/01/2015	\$35.85	\$7.30	\$13.20	20.00	950.55
			06/01/2016	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
		ntice - LABORER - Zone I		\$36.60				\$57.10
	Apprei	ntice - <i>LABORER - Zone 1</i> ve Date - 06/01/2015	06/01/2016	\$36.60	\$7.30	\$13.20 \$13.20	\$0.00	\$57.10 \$58.10
	Apprei		06/01/2016	\$36.60 \$37.60	\$7.30	\$13.20	\$0.00	\$57.10
	Apprei Effecti	ve Date - 06/01/2015	06/01/2016 12/01/2016	\$36.60 \$37.60	\$7.30 \$7.30	\$13.20 \$13.20	\$0.00	\$57.10
	Apprei Effecti Step	ve Date - 06/01/2015 percent	06/01/2016 12/01/2016 Apprentice Base Wage	\$36.60 \$37.60 Health	\$7.30 \$7.30	\$13.20 \$13.20 Supplemental Unemployment	\$0.00 \$0.00 Total Rate	\$57.10
	Apprei Effecti Step	ve Date - 06/01/2015 percent	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06	\$36.60 \$37.60 Health \$7.30	\$7.30 \$7.30 Pension \$13.20	\$13.20 \$13.20 Supplemental Unemployment	\$0.00 \$0.00 Total Rate \$41.56	\$57.10
	Apprei Effecti Step	ve Date - 06/01/2015 percent 60 70	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57	\$36.60 \$37.60 Health \$7.30 \$7.30	\$7.30 \$7.30 Pension \$13.20 \$13.20	\$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00	\$0.00 \$0.00 Total Rate \$41.56 \$45.07	\$57.10
	Apprei Effecti Step 1 2 3 4	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59	Health \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 \$13.20	\$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 Total Rate \$41.56 \$45.07 \$48.58 \$52.09	\$57.10
	Apprei Effecti Step 1 2 3 4	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015 percent	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59 Apprentice Base Wage	Health \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 \$13.20	\$13.20 \$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 \$0.00 Supplemental Unemployment	\$0.00 \$0.00 Total Rate \$41.56 \$45.07 \$48.58 \$52.09 Total Rate	\$57.10
	Apprei Effecti Step 1 2 3 4 Effecti Step	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015 percent 60	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59 Apprentice Base Wage	Health \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 Pension \$13.20	\$13.20 \$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 \$0.00 Supplemental Unemployment	\$0.00 \$0.00 Total Rate \$41.56 \$45.07 \$48.58 \$52.09 Total Rate \$42.01	\$57.10
	Apprei Effecti Step 1 2 3 4 Effecti Step 1	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015 percent 60 70	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59 Apprentice Base Wage \$21.51 \$25.10	Health \$7.30 \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 Pension \$13.20 \$13.20	\$13.20 \$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 Supplemental Unemployment	\$0.00 \$0.00 Total Rate \$41.56 \$45.07 \$48.58 \$52.09 Total Rate \$42.01 \$45.60	\$57.10
	Appreci Effecti Step 1 2 3 4 Effecti Step 1 2	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015 percent 60	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59 Apprentice Base Wage	Health \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 Pension \$13.20	\$13.20 \$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 \$0.00 Supplemental Unemployment	\$0.00 \$0.00 Total Rate \$41.56 \$45.07 \$48.58 \$52.09 Total Rate \$42.01	\$57.10
	Apprei Effecti Step 1 2 3 4 Effecti Step 1 2 3	ve Date - 06/01/2015 percent 60 70 80 90 ve Date - 12/01/2015 percent 60 70 80	06/01/2016 12/01/2016 Apprentice Base Wage \$21.06 \$24.57 \$28.08 \$31.59 Apprentice Base Wage \$21.51 \$25.10 \$28.68	Health \$7.30 \$7.30 \$7.30 \$7.30 \$7.30 \$7.30 \$7.30	\$7.30 \$7.30 \$7.30 Pension \$13.20 \$13.20 \$13.20 \$13.20 \$13.20 \$13.20 \$13.20	\$13.20 \$13.20 \$13.20 Supplemental Unemployment \$0.00 \$0.00 \$0.00 Supplemental Unemployment \$0.00 \$0.00 \$0.00	Total Rate \$41.56 \$45.07 \$48.58 \$52.09 Total Rate \$42.01 \$44.60 \$49.18	\$57.10

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER	06/01/2015	\$35.10	\$7.30	\$13.20	\$0.00	\$55.60
LABORERS - ZONE 1	12/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
	06/01/2016	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	12/01/2016	\$37.60	\$7.30	\$13.20	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER LABORERS - ZONE I	06/01/2015	\$35.10	\$7.30	\$13.20	\$0.00	\$55.60
MBORERS - ZONE I	12/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
	06/01/2016	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	12/01/2016	\$37.60	\$7.30	\$13.20	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 1	06/01/2015	\$35.25	\$7.30	\$13.20	\$0.00	\$55.75
	12/01/2015	\$36.00	\$7.30	\$13.20	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER" LABORER: MASON TENDER	0.6/01/0017	005.05		612.20	60.00	055.05
LABORERS - ZOŇE I	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
LABORER: MULTI-TRADE TENDER	06/01/2015	\$35,10	\$7.30	\$13.20	\$0.00	\$55.60
LABORERS - ZONE 1	12/01/2015	\$35.10	\$7.30	\$13.20	\$0.00	\$56.35
	06/01/2016			\$13.20	\$0.00	\$57.10
		\$36.60	\$7.30	\$13.20	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.60	\$7.30	\$13.20	\$0.00	\$30.10
LABORER: TREE REMOVER	06/01/2015	\$35.10	\$7.30	\$13.20	\$0.00	\$55.60
LABORERS - ZONE I	12/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
	06/01/2016	\$36.60	\$7.30	\$13.20	\$0.00	\$57.10
	12/01/2016	\$37.60	\$7.30	\$13.20	\$0.00	\$58.10
This classification applies to all tree work associated with the removal of standing tre a utility company for the purpose of operation, maintenance or repair of utility comps	es, and trimming and ren	noval of branche	s and limbs w		s not done for	
ASER BEAM OPERATOR	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
LABORERS - ZONE 1	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"			***			
MARBLE & TILE FINISHERS	02/01/2015	\$37.37	\$10.18	\$17.18	\$0.00	\$64.73
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2015	\$38.08	\$10.18	\$17.25	\$0.00	\$65.51
	02/01/2016	\$38.53	\$10.18	\$17.25	\$0.00	\$65.96
	08/01/2016	\$39.23	\$10.18	\$17.33	\$0.00	\$66.74
	02/01/2017	\$39.69	\$10.18	\$17.33	\$0.00	\$67.20

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	Appre	ntice - M	ARBLE & TILE FINISHER -	- Local 3 Marble & Tile					
	Effecti Step	ve Date - percent	02/01/2015	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$18.69	\$10.18	\$17.18	\$0.00	\$46.05	
	2	60		\$22.42	\$10.18	\$17.18	\$0.00	\$49.78	
	3	70		\$26.16	\$10.18	\$17.18	\$0.00	\$53.52	
	4	80		\$29.90	\$10.18	\$17.18	\$0.00	\$57.26	
	5	90		\$33.63	\$10.18	\$17.18	\$0.00	\$60.99	
	Effecti Step	ve Date - percent	08/01/2015	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$19.04	\$10.18	\$17.25	\$0.00	\$46.47	
	2	60		\$22.85	\$10.18	\$17.25	\$0.00	\$50.28	
	3	70		\$26.66	\$10.18	\$17,25	\$0.00	\$54.09	
	4	80		\$30.46	\$10.18	\$17.25	\$0.00	\$57.89	
	5	90		\$34.27	\$10.18	\$17.25	\$0.00	\$61.70	
	Notes:								
	Appre	ntice to Joi	urneyworker Ratio:1:3						
			RS & TERRAZZO MECH	02/01/2015	\$49.00	\$10.18	\$18.50	\$0.00	\$77.68
BRICKLAYERS LO	CAL 3 - M.	ARBLE & TIL	E	08/01/2015	\$49.90	\$10.18	\$18.57	\$0.00	\$78.65
				02/01/2016	\$50.47	\$10.18	\$18.57	\$0.00	\$79.22
				08/01/2016	\$51.37	\$10.18	\$18.65	\$0.00	\$80.20
				02/01/2017	\$51.94	\$10.18	\$18.65	\$0.00	\$80.77

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\$16.21

\$0.00

\$63.65

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 1)
MILLWRIGHTS LOCAL, 1121 - Zone 1

-	Step	percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$24.50	\$10.18	\$18.50	\$0.00	\$53.18	
	2	60		\$29.40	\$10.18	\$18.50	\$0.00	\$58.08	
	3	70		\$34.30	\$10.18	\$18.50	\$0.00	\$62.98	
	4	80		\$39.20	\$10.18	\$18.50	\$0.00	\$67.88	
	5	90		\$44.10	\$10.18	\$18.50	\$0.00	\$72.78	
?	Effecti	ve Date - 0	8/01/2015				Supplemental		
:	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
-	1	50		\$24.95	\$10.18	\$18.57	\$0.00	\$53.70	
	2	60		\$29.94	\$10.18	\$18.57	\$0.00	\$58.69	
	3	70		\$34.93	\$10.18	\$18.57	\$0.00	\$63.68	
	4	80		\$39.92	\$10.18	\$18.57	\$0.00	\$68.67	
	5	90		\$44.91	\$10.18	\$18.57	\$0.00	\$73.66	
Ī	Notes:								
								-	
	Appre	ntice to Jouri	eyworker Ratio:1:5						
			N CONST. SITES)	06/01/201:	5 \$42.42	\$10.00	\$14.55	\$0.00	\$66.97
RATING ENGINI	EERS LO	OCAL 4		12/01/201:	\$43.66	\$10.00	\$14.55	\$0.00	\$68.21
				06/01/2016	\$44.41	\$10.00	\$14.55	\$0.00	\$68.96
				12/01/2016	\$45.64	\$10.00	\$14.55	\$0.00	\$70.19
				06/01/2011	7 \$46.63	\$10.00	\$14.55	\$0.00	\$71.18
For apprentice ra	ites see "	Annrentice- OPE	RATING ENGINEERS"	12/01/2013	7 \$47.62	\$10.00	\$14.55	\$0.00	\$72.17
CHANICS M				06/01/201:	5 \$42.42	\$10.00	\$14.55	\$0.00	\$66.97
RATING ENGINI	EERS LC	OCAL 4		12/01/201:			\$14.55	\$0.00	\$68.21
				06/01/2016	5 \$44.41	\$10.00	\$14.55	\$0.00	\$68.96
				12/01/2016	5 \$45.64	\$10.00	\$14.55	\$0.00	\$70.19
				06/01/2013	7 \$46.63	\$10.00	\$14.55	\$0.00	\$71.18

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04/01/2015

\$37.64

\$9.80

	Cl	assification	
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	Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total I	Rate
	1	55	\$20.70	\$9.80	\$4.48	\$0.00	\$34	4.98
	2	65	\$24.47	\$9.80	\$13.36	\$0.00	\$47	7.63
	3	75	\$28.23	\$9.80	\$14.18	\$0.00	\$52	2.21
	4	85	\$31.99	\$9.80	\$14.99	\$0.00	\$56	6.78
	Notes:							i
		Steps are 2,000 hours						
	Apprei	ntice to Journeyworker Ratio:1:5	 _					
IORTAR M			06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
ABORERS - ZO	ONE I		12/01/2015		\$7.30	\$13.20	\$0.00	\$56.60
			06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
			12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
		Apprentice- LABORER"						
	HER THAN	TRUCK CRANES, GRADALLS)	06/01/2015	\$21.97	\$10.00	\$14.55	\$0.00	\$46.52
oumo El		Souther F	12/01/2015	\$22.62	\$10.00	\$14.55	\$0.00	\$47.17
			06/01/2016	\$23.01	\$10.00	\$14.55	\$0.00	\$47.56
			12/01/2016	\$23.66	\$10.00	\$14.55	\$0.00	\$48.21
			06/01/2017	\$24.17	\$10.00	\$14.55	\$0.00	\$48.72
For appren	tica rates see " .	Apprentice- OPERATING ENGINEERS"	12/01/2017	\$24.69	\$10.00	\$14.55	\$0.00	\$49.24
		ES, GRADALLS)	06/01/0016	605.60	610.00	611.55		
	NGINEERS LO		06/01/2015		\$10.00	\$14.55	\$0.00	\$50.23
			12/01/2015		\$10.00	\$14.55	\$0.00	\$50.98
			06/01/2016		\$10.00	\$14.55	\$0.00	\$51.44
			12/01/2016		\$10.00	\$14.55	\$0.00	\$52.19
			06/01/2017	\$28.24	\$10.00	\$14.55	\$0.00	\$52.79
For appren	tice rates see "/	Apprentice- OPERATING ENGINEERS"	12/01/2017	\$28.85	\$10.00	\$14.55	\$0.00	\$53.40
		EN EQUIPMENT - CLASS II	06/01/2015	\$42,42	\$10.00	\$14.55	\$0.00	\$66.97
PERATING EI	NGINEERS LO	CAL 4	12/01/2015	\$43.66	\$10.00	\$14.55	\$0.00	\$68.21
			06/01/2016	\$44.41	\$10.00	\$14.55	\$0.00	\$68.96
			12/01/2016		\$10.00	\$14,55	\$0.00	\$70.19
			06/01/2017	\$46.63	\$10.00	\$14.55	\$0.00	\$71.18
			12/01/2017	\$47.62	\$10.00	\$14.55	\$0.00	\$72.17
For apprent	tice rates see "/	Apprentice- OPERATING ENGINEERS"						J.2.17
	BRIDGES/T		01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
HINTERS LOC	'AL 35 - ZONE		07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
			01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
			07/01/2016	\$50,46	\$7.85	\$16.10	\$0.00	\$74.41
			01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Classification

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

70

75

Effecti	ve Date -	01/01/2015				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$23,83	\$7.85	\$0.00	\$0.00	\$31.68	
2	55		\$26.21	\$7.85	\$3.66	\$0.00	\$37.72	
3 .	60		\$28.60	\$7.85	\$3.99	\$0.00	\$40.44	
4	65		\$30.98	\$7.85	\$4.32	\$0.00	\$43.15	
5	70		\$33.36	\$7.85	\$14.11	\$0.00	\$55.32	
6	75		\$35.75	\$7.85	\$14.44	\$0.00	\$58.04	
7	80		\$38.13	\$7.85	\$14.77	\$0.00	\$60.75	
8	90		\$42.89	\$7.85	\$15.44	\$0.00	\$66.18	
Effecti	ve Date -	07/01/2015				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$24,28	\$7.85	\$0.00	\$0.00	\$32.13	
2	55		\$26.71	\$7.85	\$3.66	\$0.00	\$38.22	
3	60		\$29.14	\$7.85	\$3.99	\$0.00	\$40.98	

\$7.85

\$7.85

\$7.85

\$4.32

\$14.11

\$14.44

\$0.00

\$0.00

\$0.00

\$43.73

\$55.95

\$58.71

7	80	\$38.85	\$7.85	\$14.77	\$0.00	\$61.47
8	90	\$43.70	\$7.85	\$15.44	\$0.00	\$66.99
Notes	Steps are 750 hrs.					
Appre	entice to Journeyworker Ratio;1:1					

\$31.56

\$33.99

\$36.42

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2015	\$38.56	\$7.85	\$16.10	\$0.00	\$62.51
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	07/01/2015	\$39.46	\$7.85	\$16.10	\$0.00	\$63.41
11.211 paint tate shan be used. AMTERS ESCAL 35 - 2018 2	01/01/2016	\$40.41	\$7.85	\$16.10	\$0.00	\$64.36
	07/01/2016	\$41.36	\$7.85	\$16.10	\$0.00	\$65.31
	01/01/2017	\$42.31	\$7.85	\$16.10	\$0.00	\$66.26

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Et Ste	fective Date p percen		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	-	\$19.28	\$7.85	\$0.00	\$0.00	\$27.13	
2	55		\$21.21	\$7.85	\$3.66	\$0.00	\$32.72	
3	60		\$23.14	\$7.85	\$3.99	\$0.00	\$34.98	
4	65		\$25.06	\$7.85	\$4.32	. \$0.00	\$37.23	
5	70		\$26.99	\$7.85	\$14.11	\$0.00	\$48.95	
6	75		\$28.92	\$7.85	\$14.44	\$0.00	\$51.21	
7	80		\$30.85	\$7.85	\$14.77	\$0.00	\$53.47	
8	90		\$34.70	\$7.85	\$15.44	\$0.00	\$57.99	
Eff Ste	fective Date		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50		\$19.73	\$7.85	\$0.00	\$0.00	\$27.58	
2	55		\$21.70	\$7.85	\$3.66	\$0.00	\$33.21	
3	60		\$23.68	\$7.85	\$3.99	\$0.00	\$35.52	
4	65		\$25.65	\$7.85	\$4.32	\$0.00	\$37.82	
5	70		\$27.62	\$7.85	\$14.11	\$0.00	\$49.58	
6	75		\$29.60	\$7.85	\$14.44	\$0.00	\$51.89	
7	80		\$31.57	\$7.85	\$14.77	\$0.00	\$54.19	
8	90		\$35.51	\$7.85	\$15.44	\$0.00	\$58.80	
No	tes: Steps a	re 750 hrs.						
Ap	prentice to	Journeyworker Ratio:1:1						
TER (SPRAY		LAST, REPAINT)	01/01/2015	\$36.62	\$7.85	\$16.10	\$0.00	\$60.57
100CHD 33 * 1	-0443 6		07/01/2015	\$37.52	\$7.85	\$16.10	\$0.00	\$61.47
			01/01/2016	\$38.47	\$7.85	\$16.10	\$0.00	\$62.42
			07/01/2016	\$39.42	\$7.85	\$16.10	\$0.00	\$63.37
			01/01/2017	\$40.37	\$7.85	\$16.10	\$0.00	\$64.32

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	Effecti Step	ve Date - 01/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$18.31	\$7.85	\$0.00	\$0.00	\$26.16	
	2	55	\$20.14	\$7.85	\$3.66	\$0.00	\$31.65	
	3	60	\$21.97	\$7.85	\$3.99	\$0.00	\$33.81	
	4	65	\$23.80	\$7.85	\$4.32	\$0.00	\$35.97	
	5	70	\$25.63	\$7.85	\$14.11	\$0,00	\$47.59	
	6	75	\$27.47	\$7.85	\$14.44	\$0.00	\$49.76	
	7	80	\$29.30	\$7.85	\$14.77	\$0.00	\$51.92	
	8	90	\$32.96	\$7.85	\$15.44	\$0.00	\$56.25	
	Effect	ive Date - 07/01/2015				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$18.76	\$7.85	\$0.00	\$0.00	\$26.61	
	2	55	\$20.64	\$7.85	\$3.66	\$0.00	\$32.15	
	3	60	\$22.51	\$7.85	\$3.99	\$0.00	\$34.35	
	4	65	\$24.39	\$7.85	\$4.32	\$0.00	\$36.56	
	5	70	\$26.26	\$7.85	\$14.11	\$0.00	\$48.22	
	6	75	\$28.14	\$7.85	\$14.44	\$0.00	\$50.43	
	7	80	\$30.02	\$7.85	\$14.77	\$0.00	\$52.64	
	8	90	\$33.77	\$7.85	\$15.44	\$0.00	\$57.06	
	Notes:							
	i	Steps are 750 hrs.					j	
		ntice to Journeyworker Ratio:1:1						
INTER (* BORERS - Z		MARKINGS)	06/01/2015	\$35.10	\$7.30	\$13.20	\$0.00	\$55.60
OILEIW - Zi	ONE I		12/01/2015	\$35.85	\$7.30	\$13.20	\$0.00	\$56.35
			06/01/2016	\$36.60	\$7,30	\$13.20	\$0.00	\$57.10
For Appre	ntice rates see	"Apprentice- LABORER"	12/01/2016	\$37.60	\$7.30	\$13.20	\$0.00	\$58.10
	,	RUSH, NEW) *	01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
		faces to be painted are new constru	otion, 07/01/2015			\$16.10	\$0.00	\$62.01
w paint i	rate shall be	used.PAINTERS LOCAL 35 - ZONE 2	01/01/2016		\$7.85	\$16.10	\$0.00	\$62.96
			07/01/2016			\$16.10	\$0.00	\$63.91
			01/01/2017		\$7.85	\$16.10	\$0.00	\$64.86

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	Effect	ive Date - 01/01/2015				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$18.58	\$7.85	\$0.00	\$0.00	\$26.43	
	2	55	\$20.44	\$7.85	\$3.66	\$0.00	\$31.95	
	3	60	\$22.30	\$7.85	\$3.99	\$0.00	\$34.14	
	4	65	\$24.15	\$7.85	\$4.32	\$0.00	\$36.32	
	5	70	\$26.01	\$7.85	\$14.11	\$0.00	\$47.97	
	6	75	\$27.87	\$7.85	\$14.44	\$0.00	\$50.16	
	7	80	\$29.73	\$7.85	\$14.77	\$0.00	\$52.35	
	. 8	90	\$33.44	\$7.85	\$15.44	\$0.00	\$56.73	
	Effect Step	ive Date - 07/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$19.03	\$7.85	\$0.00	\$0.00	\$26.88	
	2	55	\$20.93	\$7.85	\$3.66	\$0.00	\$32.44	
	3	60	\$22.84	\$7.85	\$3.99	\$0.00	\$34.68	
	4	65	\$24.74	\$7.85	\$4.32	\$0.00	\$36.91	
	5	70	\$26.64	\$7.85	\$14.11	\$0.00	\$48.60	
	6	75	\$28.55	\$7.85	\$14.44	\$0.00	\$50.84	
	7	80	\$30.45	\$7.85	\$14.77	\$0.00	\$53.07	
	8	90	\$34,25	\$7.85	\$15.44	\$0.00	\$57.54	
	Notes:	Steps are 750 hrs.						
	Appre	ntice to Journeyworker Ratio:1:1	 	<u>-</u> -			'	
		RUSH, REPAINT)	01/01/2015	\$35.22	\$7.85	\$16.10	\$0.00	\$59.17
ERS LOCA	L 53 - ZON	5.2	07/01/2015	\$36.12	\$7,85	\$16.10	\$0.00	\$60.07
			01/01/2016	\$37.07	\$7.85	\$16.10	\$0.00	\$61.02
			07/01/2016	\$38.02	\$7.85	\$16.10	\$0.00	\$61.97
			01/01/2017	7 \$38.97	\$7.85	\$16.10	\$0.00	\$62,92

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	Step	ve Date - percent	01/01/2015 App	rentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$17.61	\$7.85	\$0.00	\$0.00	\$25,46	
	2	55		\$19.37	\$7.85	\$3.66	\$0.00	\$30.88	
	3	60		\$21.13	\$7.85	\$3.99	\$0.00	\$32.97	
	4	65		\$22.89	\$7.85	\$4,32	\$0.00	\$35.06	
	5	70		\$24.65	\$7.85	\$14.11	\$0.00	\$46.61	
	6	75		\$26.42	\$7.85	\$14.44	\$0.00	\$48.71	
	7	80		\$28.18	\$7.85	\$14.77	\$0.00	\$50.80	
	8	90		\$31.70	\$7.85	\$15.44	\$0.00	\$54.99	
	Effecti	ve Date -	07/01/2015				Supplemental		
	Step	percent	Арр	rentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$18.06	\$7.85	\$0.00	\$0.00	\$25.91	
	2	55		\$19.87	\$7.85	\$3.66	\$0.00	\$31.38	
	3	60		\$21.67	\$7.85	\$3.99	\$0.00	\$33.51	
	4	65		\$23.48	\$7.85	\$4.32	\$0.00	\$35.65	
	5	70		\$25.28	\$7.85	\$14.11	\$0.00	\$47.24	
	6	75		\$27.09	\$7.85	\$14.44	\$0.00	\$49.38	
	7	80		\$28.90	\$7.85	\$14.77	\$0.00	\$51.52	
	8	90		\$32.51	\$7.85	\$15.44	\$0.00	\$55.80	
	Notes:								
		Steps are 7:	50 hrs.					ĺ	
•	Appre	ntice to Jour	neyworker Ratio:1:1						
		UCKS DRIV		06/01/2015	\$32.5	8 \$9.91	\$9.33	\$0.00	\$51.82
amsters Joh	VI COUNC.	I. NO. 10 ZONI	S.A.	08/01/2015	\$32,5	8 \$10.41	\$9.33	\$0.00	\$52.32
				12/01/2015	\$32.5	8 \$10.41	\$10.08	\$0.00	\$53.07
				06/01/2016	\$33.0	8 \$10.41	\$10.08	\$0.00	\$53.57
				08/01/2016	\$33.0	8 \$10.91	\$10.08	\$0.00	\$54.07
				12/01/2016	\$33.0	8 \$10.91	\$10.89	\$0.00	\$54.88
	OCK CO	NSTRUCTO	R (UNDERPINNING AND	08/01/2014	\$41.6	0 \$9.80	\$18.17	\$0.00	\$69.57
ECK) le driver lo	CAL 56 (ZC	NE 1)		08/01/2015	\$43.1	0 \$9.80	\$18.17	\$0.00	\$71.07
LE DRIVEF				08/01/2014	\$41.6	0 \$9.80	\$18.17	\$0.00	\$69.57
LE DRIVER LO	CAL 56 (ZO	NE 1)		08/01/2015			\$18.17	\$0.00	\$71.07

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	Step	ive Date - percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$20.80	\$9.80	\$18.17	\$0.00	\$48.77	
	2	60		\$24.96	\$9.80	\$18.17	\$0.00	\$52.93	
	3	70		\$29.12	\$9.80	\$18.17	\$0.00	\$57.09	
	4	75		\$31.20	\$9.80	\$18.17	\$0.00	\$59.17	
	5	80		\$33.28	\$9.80	\$18.17	\$0.00	\$61.25	
	6	80		\$33.28	\$9.80	\$18.17	\$0.00	\$61.25	
	7	90		\$37.44	\$9.80	\$18.17	\$0.00	\$65.41	
	8	90		\$37.44	\$9.80	\$18.17	\$0.00	\$65.41	
	Effecti Step	ve Date - percent	08/01/2015	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$21.55	\$9.80	\$18.17	\$0.00	\$49.52	
	2	60		\$25.86	\$9.80	\$18.17	\$0.00	\$53.83	
	3	70		\$30.17	\$9.80	\$18.17	\$0.00	\$58.14	
	4	75		\$32.33	\$9.80	\$18.17	\$0.00	\$60.30	
	5	80		\$34.48	\$9.80	\$18.17	\$0.00	\$62.45	
	6	80		\$34.48	\$9.80	\$18.17	\$0.00	\$62.45	
	7	90		\$38.79	\$9.80	\$18.17	\$0.00	\$66.76	
	8	90		\$38.79	\$9.80	\$18.17	\$0.00	\$66.76	
	Notes:								
	<u> </u>								
	Appre	ntice to Jo	rneyworker Ratio:1:3						
	R & STEAM	MFITTER		03/01/2015	\$48.69	\$9.70	\$16.89	\$0.00	\$75.28
111210	LOCAL 537		•	09/01/2015	\$49.69	\$9.70	\$16.89	\$0.00	\$76.28
				03/01/2016	\$50.69	\$9.70	\$16.89	\$0.00	\$77.28
				09/01/2016	\$51.69	\$9.70	\$16.89	\$0.00	\$78.28

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE)	06/01/2015	\$42.83	\$10.00	\$14.55	\$0.00	\$67.38
OPERATING ENGINEERS LOCAL 4	12/01/2015	\$44.08	\$10.00	\$14.55	\$0.00	\$68.63
	06/01/2016	\$44.83	\$10.00	\$14.55	\$0.00	\$69.38
	12/01/2016	\$46.08	\$10.00	\$14.55	\$0.00	\$70.63
	06/01/2017	\$47.08	\$10.00	\$14.55	\$0.00	\$71.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	\$48.08	\$10.00	\$14.55	\$0.00	\$72.63
PUMP OPERATOR (DEWATERING, OTHER)	06/01/2015	\$29.61	\$10.00	\$14.55	\$0.00	\$54.16
OPERATING ENGINEERS LOCAL 4	12/01/2015	\$30.48	\$10.00	\$14.55	\$0.00	\$55.03
	06/01/2016	\$31.00	\$10.00	\$14.55	\$0.00	\$55.55
	12/01/2016	\$31.87	\$10.00	\$14.55	\$0.00	\$56.42
	06/01/2017	\$32.56	\$10.00	\$14.55	\$0.00	\$57.11
	12/01/2017	\$33.25	\$10.00	\$14.55	\$0.00	\$57.80
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10	05/01/2015	\$27.88	\$7.73	\$8.92	\$0.00	\$44.53
(Drivers Hired After 4/30/2010) TEAMSTERS LOCAL 25b	07/01/2015	\$27.88	\$7.98	\$8.92	\$0.00	\$44.78
	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
READY-MIX CONCRETE DRIVER	05/01/2015	\$29.18	\$7.73	\$8.92	\$0.00	\$45.83
TEAMSTERS LOCAL 25b	07/01/2015	\$29.18	\$7.98	\$8.92	\$0.00	\$46.08
	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
RECLAIMERS	06/01/2015	\$42.42	\$10.00	\$14.55	\$0.00	\$66.97
OPERATING ENGINEERS LOCAL 4	12/01/2015	\$43.66	\$10.00	\$14.55	\$0.00	\$68.21
	06/01/2016	\$44.41	\$10.00	\$14.55	\$0.00	\$68.96
	12/01/2016	\$45.64	\$10.00	\$14.55	\$0.00	\$70.19
	06/01/2017	\$46.63	\$10.00	\$14.55	\$0.00	\$71.18
For apprentice rates see "Apprentice-OPERATING ENGINEERS"	12/01/2017	\$47.62	\$10.00	\$14.55	\$0.00	\$72.17
RESIDENTIAL WOOD FRAME (All Other Work) CARPENTERS -ZONE 2 (Residential Wood)	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER **	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

^{**} The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. CARPENTERS - ZONE

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As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.

App	rent	ice .	•	CARLENTER (Residential	wood Frame) - Zone 2
				0.010.1.00.1.1	

		*					
Effect Step	ive Date - 05/01/2011 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20,88	
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$20,00	
3	65	\$14.34 \$15.76	\$6.34				
4	70	·		\$6.23	\$0.00	\$28.33	
5	75	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54	
6		\$18.18	\$6.34	\$6.23	\$0.00	\$30.75	
7	80 85	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96	
8		\$20.60	\$6.34	\$6.23	\$0.00	\$33.17	
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39	,
Notes	entice to Journeyworker Ratio:1:5						
DE-ON MOTORIZE	D BUGGY OPERATOR	06/01/2015	5 \$35.35	\$7.30	\$13.20	\$0.00	\$55.85
ABORERS - ZONE 1		12/01/2015			\$13.20	\$0.00	\$56.60
		06/01/2016			\$13.20	\$0.00	\$57.35
For apprentice rates see	"Apprentice- LABORER"	12/01/2016			\$13.20	\$0.00	\$58.35
	MULCHING MACHINE	06/01/2015	\$42.42	\$10.00	\$14.55	\$0.00	\$66.97
PERATING ENGINEERS L	OCAL 4	12/01/2015	\$43.66	\$10.00	\$14.55	\$0.00	\$68.21
•		06/01/2016	\$44.41	\$10.00	\$14.55	\$0.00	\$68.96
		12/01/2016	\$45.64	\$10.00	\$14.55	\$0.00	\$70.19
		06/01/2017	\$46.63	\$10.00	\$14.55	\$0.00	\$71.18
		12/01/2017	\$47.62	\$10.00	\$14.55	\$0.00	\$72.17
	"Apprentice- OPERATING ENGINEERS"						
OOFER (Inc.Roofer \ OOFERS LOCAL 33	Vaterproofing &Roofer Damproofg)	02/01/2015	\$40.11	\$10.50	\$11.60	\$0.00	\$62.21
AN LING LOCAL 33		08/01/2015	\$41.01	\$10.50	\$11.60	\$0.00	\$63.11

02/01/2016

\$41.91

\$10.50 \$11.60

\$0.00

\$64.01

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	Appre	ntice - RO	OOFER - Local 33						
	Effecti Step	ve Date - percent	02/01/2015	Apprentice Base Wage	Ugolth	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$20.06	\$10,50	\$3,38	\$0.00	\$33.94	
	2	60							
	3			\$24.07	\$10.50	\$11.60	\$0.00	\$46.17	
	4	65		\$26.07	\$10.50	\$11.60	\$0.00	\$48.17	
		75		\$30.08	\$10.50	\$11.60	\$0.00	\$52.18	
	5	85		\$34.09	\$10.50	\$11.60	\$0.00	\$56.19	
	Effecti	ve Date -	08/01/2015				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$20.51	\$10.50	\$3.38	\$0.00	\$34,39	
	2	60		\$24.61	\$10.50	\$11.60	\$0.00	\$46.71	
	3	65		\$26.66	\$10.50	\$11.60	\$0.00	\$48.76	
	4	75		\$30.76	\$10.50	\$11.60	\$0.00	\$52.86	
	5	85		\$34.86	\$10.50	\$11.60	\$0.00	\$56.96	
	Notes:		i-10, the 1:10; Reroofing: 2000 hrs.; Steps 2-5 are 10						
	Appre	ntice to Jo	urneyworker Ratio:**						
		E / PRECA	ST CONCRETE	02/01/201:	5 \$40.36	\$10.50	\$11.60	\$0.00	\$62.46
ROOFERS LOCA	I. 33			08/01/201:	5 \$41.26	\$10.50	\$11.60	\$0.00	\$63.36
For apprentic	ce rates see *	Apprentice- R	OOFER"	02/01/2016	5 \$42.1 <i>6</i>	\$10.50	\$11.60	\$0.00	\$64.26
SHEETMETA				02/01/201:	5 \$43.28	\$10.20	\$20.54	\$2.22	\$76.24
SHEETMETAL W	ORKERS LO	OCAL 17 - A		08/01/201:			\$20.54	\$2.22	\$77.24
				02/01/2010			\$20.54	\$2.22	\$78.24
				08/01/2016	•		\$20.54	\$2.22	\$79.39
				02/01/201			\$20.54	\$2.22	\$80.49
				08/01/201			\$20.54	\$2.22	\$81.59
				02/01/201			\$20.54	\$2.22	\$82.74

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Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Ra
1	40	\$17.31	\$10.20	\$4.58	\$0.00	\$32.0
2	40	\$17.31	\$10.20	\$4.58	\$0.00	\$32.0
3	45	\$19.48	\$10.20	\$9.09	\$1.16	\$39.9
4	45	\$19.48	\$10.20	\$9.09	\$1.16	\$39.9
5	50	\$21.64	\$10.20	\$9.91	\$1.25	\$43.0
6	50	\$21.64	\$10.20	\$10.16	\$1.26	\$43.2
7	60	\$25.97	\$10.20	\$11.55	\$1.43	\$49.1
8	65	\$28.13	\$10.20	\$12.38	\$1.52	.\$52.2
9	75	\$32.46	\$10.20	\$14.02	\$1.70	\$58.3
10	85	\$36.79	\$10.20	\$15.16	\$1.86	\$64.0
Effecti	ve Date - 08/01/2015				Supplemental	
Step percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Ra
1	40	\$17.71	\$10.20	\$4.58	\$0.00	\$32.4
2	40	\$17.71	\$10.20	\$4.58	\$0.00	\$32.4
3	45	\$19.93	\$10.20	\$9.09	\$1.18	\$40.4
4	45	\$19.93	\$10.20	\$9.09	\$1.18	\$40.4
5	50	\$22.14	\$10.20	\$9.91	\$1.27	\$43.5
6	50	\$22.14	\$10.20	\$10.16	\$1.28	\$43.7
7	60	\$26.57	\$10.20	\$11.55	\$1.45	\$49.7
8	65	\$28.78	\$10.20	\$12.38	\$1.54	\$52.9
9	75	\$33.21	\$10.20	\$14.02	\$1.72	\$59.1
10	85	\$37.64	\$10.20	\$15.16	\$1.89	\$64.8
Notes:	Steps are 6 mos.					
	ntice to Journeyworker Ratio:1			- — — —		

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Appre	ntice - SIGN ERECTOR - Local 35	Zone 2					
Effect Step	ive Date - 06/01/2013 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98	
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72	
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01	
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30	
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19	
6 ·	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48	
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77	
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06	
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35	
Notes:	Steps are 4 mos.					 	
Appre	ntice to Journeyworker Ratio:1:1						
SPECIALIZED EARTH MOVING EQUIP < 35 TONS		06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
TEAMSTERS JOINT COUNC	TL NO. 10 ZONE A	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
		12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
		06/01/2016	\$33,54	\$10.41	\$10.08	\$0.00	\$54.03
		08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
		12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE A		06/01/2015	\$33.33	\$9.91	\$9.33	\$0.00	\$52.57
		08/01/2015	\$33.33	\$10.41	\$9.33	\$0.00	\$53.07
		12/01/2015	\$33.33	\$10.41	\$10.08	\$0.00	\$53.82
		06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
		08/01/2016	\$33.83	\$10.91	\$10.08	\$0.00	\$54.82
		12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63
SPRINKLER FITTER SPRINKLER FITTERS LOCA	I 550 /Section Al Zone I	03/01/2015	\$54.43	\$8.42	\$14.90	\$0.00	\$77.75
or with beking the Eoch	2 330 · [Section 11] Zone 1	10/01/2015	\$55.58	\$8.42	\$14.90	\$0.00	\$78.90
		01/01/2016	\$55.58	\$8.67	\$15.05	\$0.00	\$79.30
		03/01/2016	\$56.58	\$8.67	\$15.05	\$0.00	\$80.30
		10/01/2016	\$57.73	\$8.67	\$15.05	\$0.00	\$81.45
		03/01/2017	\$58.73	\$8.67	\$15.05	\$0.00	\$82.45

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Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1

	Step	ve Date - 03/01/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	35	\$19.05	\$8.42	\$8.40	\$0.00	\$35.87	
	2	40	\$21.77	\$8.42		\$0.00	\$38.59	
	3	45			\$8.40			
	4		\$24.49	\$8.42	\$8.40	\$0.00	\$41.31	
		50	\$27.22	\$8.42	\$8.40	\$0.00	\$44.04	
	5	55	\$29.94	\$8.42	\$8.40	\$0.00	\$46.76	
	6	60	\$32.66	\$8.42	\$8,40	\$0.00	\$49.48	
	7	65	\$35.38	\$8.42	\$8.40	\$0.00	\$52.20	
	8	70	\$38.10	\$8.42	\$8.40	\$0.00	\$54.92	
	9	75	\$40.82	\$8.42	\$8.40	\$0.00	\$57.64	
	10	80	\$43.54	\$8.42	\$8.40	\$0.00	\$60.36	
	Effecti	ve Date - 10/01/2015				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	35	\$19.45	\$8.42	\$8.40	\$0.00	\$36.27	
	2	40	\$22.23	\$8.42	\$8.40	\$0.00	\$39.05	
	3	45	\$25.01	\$8.42	\$8.40	\$0.00	\$41.83	
	4	50	\$27.79	\$8.42	\$8.40	\$0.00	\$44.61	
	5	55	\$30.57	\$8.42	\$8.40	\$0.00	\$47.39	
	6	60	\$33.35	\$8.42	\$8.40	\$0.00	\$50.17	
	7	65	\$36.13	\$8.42	\$8.40	\$0.00	\$52.95	
	8	70	\$38.91	\$8,42	\$8.40	\$0.00	\$55.73	
	9	75	\$41.69	\$8.42	\$8.40	\$0.00	\$58.51	
	10	80	\$44.46	\$8.42	\$8.40	\$0.00	\$61.28	
	Notes:	Apprentice entered prior 9/30/10: 40/45/50/55/60/65/70/75/80/85						
	<u> </u>	Steps are 850 hours						
		ntice to Journeyworker Ratio:1:3						
AM BOIL			06/01/2015	\$42.4	2 \$10.00	\$14.55	\$0.00	\$66.97
			12/01/2015	\$43.6	6 \$10.00	\$14.55	\$0.00	\$68.21
			06/01/2016	\$44.4	1 \$10.00	\$14.55	\$0.00	\$68.96
			12/01/2016	\$45.6	4 \$10.00	\$14.55	\$0.00	\$70.19
			06/01/2017	\$46.6	3 \$10.00	\$14.55	\$0.00	\$71.18
			12/01/2017	\$47.6	2 \$10.00	\$14.55	\$0.00	\$72.17
		Apprentice- OPERATING ENGINEERS" PELLED OR TRACTOR DRAWN				041	***	
IPERS, SI ATING ENG			06/01/2015			\$14.55	\$0.00	\$66.97
			12/01/2015			\$14.55	\$0.00	\$68.21
			06/01/2016			\$14.55	\$0.00	\$68.96
			12/01/2016	\$45.6	4 \$10.00	\$14.55	\$0.00	\$70.19
			06/01/2017	\$46.6	3 \$10.00	\$14.55	\$0.00	\$71.18
		Apprentice- OPERATING ENGINEERS"	12/01/2017	\$47.6	2 \$10.00	\$14.55	\$0.00	\$72.17

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TELECOMMUNICATION TECHNICIAN	03/01/2015	\$33.88	\$13.00	\$13.70	\$0.00	\$60.58
ELECTRICIANS LOCAL 103	09/01/2015	\$34.60	\$13.00	\$13.72	\$0.00	\$61.32
	03/01/2016	\$35.31	\$13.00	\$13.74	\$0.00	\$62.05

Step	ve Date - percent	03/01/2015 .	Apprentice Base Wage	Health		Pension	Supplemental Unemployment	Total Rate	
1	40		\$13.55	\$13.00		\$0.41	\$0.00	\$26,96	
2	40		\$13.55	\$13.00		\$0.41	\$0.00	\$26.96	
3	45		\$15.25	\$13.00		\$10.87	\$0.00	\$39.12	
4	45		\$15.25	\$13.00		\$10.87	\$0.00	\$39.12	
5	50		\$16.94	\$13.00		\$11,11	\$0.00	\$41.05	
6	55		\$18.63	\$13.00		\$11.38	\$0.00	\$43.01	
7	60		\$20.33	\$13.00		\$11.64	\$0.00	\$44.97	
8	65		\$22.02	\$13.00		\$11.89	\$0.00	\$46.91	
9	70		\$23.72	\$13.00		\$12.15	\$0.00	\$48.87	
10	75		\$25.41	\$13.00		\$12.41	\$0.00	\$50.82	
	ve Date -	09/01/2015	America Programme	TY115		D t	Supplemental Unemployment	T-4-1 D-4-	
Step 1	percent		Apprentice Base Wage			Pension		Total Rate	
	40		\$13.84	\$13.00		\$0.42	\$0.00	\$27.26	
2	40		\$13.84	\$13.00		\$0.42	\$0.00	\$27.26	
3	45		\$15.57	\$13.00		\$10.88	\$0.00	\$39.45	
4	45		\$15.57	\$13.00		\$10.88	\$0.00	\$39.45	
5	50		\$17.30	\$13.00		\$11.14	\$0.00	\$41.44	
6	55		\$19.03	\$13.00		\$11.39	\$0.00	\$43.42	
7	60		\$20.76	\$13.00		\$11.65	\$0.00	\$45.41	
8	65		\$22.49	\$13.00		\$11.90	\$0.00	\$47.39	
9	70		\$24.22	\$13.00		\$12.17	\$0.00	\$49.39	
10	75		\$25.95	\$13.00		\$12.43	\$0.00	\$51.38	
Notes:	·								
Ļ									
 		ırneyworker Ratio:1:1							
FINISHEI <i>OCAL 3 - M</i>	RS <i>arble & til</i>	E	02/01/201		47.90	\$10.18	\$18.50	\$0.00	\$76.5
			08/01/201	,	48.80	\$10.18	\$18.57	\$0.00	\$77.5
			02/01/201		49.37	\$10.18	\$18.57	\$0.00	\$78.1
			08/01/201	5 \$:	50.27	\$10.18	\$18.65	\$0.00	\$79.1

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Classification

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

	Effect	ive Date - 02/01/2015					Supplemental		
	Step	percent	Apprenti	ce Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50		\$23.95	\$10.18	\$18.50	\$0.00	\$52.63	
	2	60		\$28.74	\$10.18	\$18.50	\$0.00	\$57.42	
	3	70		\$33.53	\$10.18	\$18.50	\$0.00	\$62,21	
	4	80		\$38.32	\$10.18	\$18.50	\$0.00	\$67.00	
	5	90		\$43.11	\$10.18	\$18.50	\$0.00	\$71.79	
		ive Date - 08/01/2015					Supplemental		
	Step	percent	Apprenti	ce Base Wage		Pension	Unemployment	Total Rate	
	1	50		\$24.40	\$10.18	\$18.57	\$0.00	\$53.15	
	2	60		\$29.28	\$10.18	\$18.57	\$0.00	\$58.03	
	3	70	(\$34.16	\$10.18	\$18.57	\$0.00	\$62,91	
	4	80	,	\$39.04	\$10.18	\$18.57	\$0.00	\$67.79	
	5	90		\$43.92	\$10.18	\$18.57	\$0.00	\$72.67	
	Notes:								
	1							i	
		ntice to Journeyworker Ratio:1:3							
TEST BORING DRILLER LABORERS - FOUNDATION AND MARINE For apprentice rates see "Apprentice- LABORER"			06/01/201:	\$36.45	\$7.30	\$13.40	\$0.00	\$57.15	
			12/01/201;	\$37.20	\$7.30	\$13.40	\$0.00	\$57.90	
			06/01/2016	\$37.95	\$7.30	\$13.40	\$0.00	\$58.65	
			12/01/2016	\$38.95	\$7.30	\$13.40	\$0.00	\$59,65	
TEST BORING				06/01/201:	\$35.17	\$7.30	\$13.40	\$0.00	\$55.87
ABORERS - FOU	NDATION	AND MARINE		12/01/201:	\$35.92	\$7.30	\$13.40	\$0.00	\$56.62
				06/01/2010	\$36.67	\$7.30	\$13.40	\$0.00	\$57.37
				12/01/2016	\$37.67	\$7.30	\$13.40	\$0.00	\$58.37
		'Apprentice- LABORER"							
TEST BORING ABORERS - FOU				06/01/2015	\$35.05	\$7.30	\$13.40	\$0.00	\$55.75
		ALLO HOMONE		12/01/2013	\$35.80	\$7.30	\$13.40	\$0.00	\$56.50
				06/01/2016	\$36.55	\$7.30	\$13.40	\$0.00	\$57.25
n		// / / / / / / / / / / / / / / / / / /		12/01/2016	\$37.55	\$7.30	\$13.40	\$0.00	\$58.25
		'Apprentice- LABORER"				•			
TRACTORS/PORTABLE STEAM GENERATORS OPERATING ENGINEERS LOCAL 4			06/01/201:			\$14.55	\$0.00	\$66.97	
				12/01/2013			\$14.55	\$0.00	\$68.21
				06/01/2016		\$10.00	\$14.55	\$0.00	\$68.96
				12/01/2010		\$10.00	\$14.55	\$0.00	\$70.19
				06/01/2011	\$46.63	\$10.00	\$14.55	\$0.00	\$71.18
				12/01/2017	\$47.62	\$10.00	\$14.55	\$0.00	\$72.17

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRAILERS FOR EARTH MOVING EQUIPMENT	06/01/2015	\$33.62	\$9.91	\$9.33	\$0.00	\$52.86
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2015	\$33.62	\$10.41	\$9.33	\$0.00	\$53.36
•	12/01/2015	\$33.62	\$10.41	\$10.08	\$0.00	\$54.11
•	06/01/2016	\$34.12	\$10.41	\$10.08	\$0.00	\$54.61
	08/01/2016	\$34.12	\$10.91	\$10.08	\$0.00	\$55.11
	12/01/2016	\$34.12	\$10.91	\$10.89	\$0.00	\$55.92
TUNNEL WORK - COMPRESSED AIR	06/01/2015	\$47.33	\$7.30	\$13.80	\$0.00	\$68.43
ABORERS (COMPRESSED AIR)	12/01/2015	\$48.08	\$7.30	\$13.80	\$0.00	\$69.18
	06/01/2016	\$48.83	\$7.30	\$13.80	\$0.00	\$69.93
	12/01/2016	\$49.83	\$7.30	\$13.80	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	06/01/2015	\$49.33	\$7.30	\$13.80	\$0.00	\$70.43
ABORERS (COMPRESSED AIR)	12/01/2015	\$50.08	\$7.30	\$13.80	\$0.00	\$71.18
	06/01/2016	\$50.83	\$7.30	\$13.80	\$0.00	\$71.93
	12/01/2016	\$51.83	\$7.30	\$13.80	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
FUNNEL WORK - FREE AIR ABORERS (FREE AIR TUNNEL)	06/01/2015	\$39.40	\$7.30	\$13.80	\$0.00	\$60.50
ADOREIO (FREE AIR FORNEL)	12/01/2015	\$40.15	\$7.30	\$13.80	\$0.00	\$61.25
	06/01/2016	\$40.90	\$7.30	\$13.80	\$0.00	\$62.00
	12/01/2016	\$41.90	\$7.30	\$13.80	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
FUNNEL WORK - FREE AIR (HAZ, WASTE) ABORERS (FREE AIR TUNNEL)	06/01/2015	\$41.40	\$7.30	\$13.80	\$0.00	\$62.50
,	12/01/2015	\$42.15	\$7.30	\$13.80	\$0.00	\$63.25
	06/01/2016	\$42.90	\$7.30	\$13.80	\$0.00	\$64.00
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$43.90	\$7.30	\$13.80	\$0.00	\$65.00
VAC-HAUL	06/01/0015		00.01	60.22	60.00	050.00
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
WAGON DRILL OPERATOR	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
NAGON DRILL OPERATOR ABORERS - ZONE I	06/01/2015	\$35.35	\$7.30	\$13.20	\$0.00	\$55.85
	12/01/2015	\$36.10	\$7.30	\$13.20	\$0.00	\$56.60
	06/01/2016	\$36.85	\$7.30	\$13.20	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.85	\$7.30	\$13.20	\$0.00	\$58.35
WASTE WATER PUMP OPERATOR	06/01/0017	¢ (0.00	610.00	¢1.4.55	20.00	677.30
OPERATING ENGINEERS LOCAL 4	06/01/2015	\$42.83	\$10.00	\$14.55	\$0.00	\$67.38
•	12/01/2015	\$44.08	\$10.00	\$14.55	\$0.00	\$68.63
	06/01/2016	\$44.83	\$10.00	\$14.55	\$0.00	\$69.38
	12/01/2016	\$46.08	\$10.00	\$14.55	\$0.00	\$70.63
	06/01/2017	\$47.08	\$10.00	\$14.55	\$0.00	\$71.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	\$48.08	\$10.00	\$14.55	\$0.00	\$72.63

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WATER METER INSTALLER	03/01/2015	\$50.21	\$10.32	\$14.89	\$0.00	\$75.42
PLUMBERS & GASFITTERS LOCAL 12	09/01/2015	\$51.21	\$10.32	\$14.89	\$0.00	\$76.42
	03/01/2016	\$52.36	\$10.32	\$14.89	\$0.00	\$77.57
	09/01/2016	\$53.41	\$10.32	\$14.89	\$0.00	\$78.62
	03/01/2017	\$54.41	\$10.32	\$14.89	\$0.00	\$79.62
For apprentice rates see "Apprentice-PLUMBER/PIPEFITTER" or "PLUMB	ER/GASFITTER*	*				*****
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$25.66	\$8.70	\$4.48	\$0.00	\$38.84
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$36.55	\$8.70	\$6.58	\$0.00	\$51.83
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$29.94	\$8.70	\$6.05	\$0.00	\$44.69
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$23.52	\$8.70	\$5.24	\$0.00	\$37.46
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$36.35	\$8.70	\$9.43	\$0.00	\$54.48
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$32.08	\$8.70	\$6.59	\$0.00	\$47.37
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL, 104	09/01/2013	\$23.52	\$8.70	\$3.72	\$0.00	\$35.94
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$19.25	\$8.70	\$2.85	\$0.00	\$30.80
For apprentice rates see "Apprentice-LINEMAN"						
JÖURNEYMAN LINEMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	09/01/2013	\$42.77	\$8.70	\$11.78	\$0.00	\$63.25

Apprentice - LINEMAN (Outside Electrical) - East Local 104

C+	ive Date -	09/01/2013	A	TT145	D	Supplemental	m . 1 p .
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	60		\$25.66	\$8.70	\$4.24	\$0.00	\$38.60
2	65		\$27.80	\$8.70	\$4.71	\$0.00	\$41.21
3	70		\$29.94	\$8.70	\$5,43	\$0.00	\$44.07
4	75		\$32.08	\$8.70	\$6.16	\$0.00	\$46.94
5	80		\$34.22	\$8.70	\$6.88	\$0.00	\$49.80
6	85		\$36.35	\$8.70	\$7.62	\$0.00	\$52.67
7	90		\$38.49	\$8.70	\$8.83	\$0.00	\$56.02

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental . Unemployment	Total Rate
TELEDATA CABLE SPLICER	01/01/2015	\$28.12	\$4.25	\$3.09	\$0.00	\$35.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/01/2016	\$28.98	\$4.25	\$3.12	\$0.00	\$36.35
TELEDATA LINEMAN/EQUIPMENT OPERATOR	01/01/2015	\$26.49	\$4.25	\$3.04	\$0.00	\$33.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/01/2016	\$27.31	\$4.25	\$3.07	\$0.00	\$34.63
TELEDATA WIREMAN/INSTALLER/TECHNICIAN	01/01/2015	\$26.49	\$4.25	\$3.04	\$0.00	\$33.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/01/2016	\$27.31	\$4.25	\$3.07	\$0.00	\$34.63
TREE TRIMMER	02/01/2015	\$18.05	\$3.55	\$0.00	\$0.00	\$21.60
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/31/2016	\$18.51	\$3,55	\$0.00	\$0.00	\$22.06
This classification applies only to tree work done: (a) for a utility company, R.E.A. coop operating, maintaining, or repairing the utility company's equipment, and (c) by a person This classification does not apply to wholesale tree removal.						
TREE TRIMMER GROUNDMAN	02/01/2015	\$15.92	\$3.55	\$0.00	\$0.00	\$19.47
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	01/31/2016	\$16.32	\$3.55	\$0.00	\$0.00	\$19.87
This classification applies only to tree work done; (a) for a utility company, R.E.A. coop operating, maintaining, or repairing the utility company's equipment, and (c) by a person classification does not apply to wholesale tree removal.						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

- ** Multiple ratios are listed in the comment field.

 *** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

 **** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

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The Massachusetts Prevailing Wage Law M.G.L. ch. 149, §§ 26 – 27

NOTICE TO AWARDING AUTHORITIES

- The enclosed wage schedule applies only to the specific project listed at the top and will be updated for any public construction project lasting longer than one (1) year.
- You should request an updated wage schedule from the Division of Occupational Safety if you have not opened bids or selected a contractor within 90 days of the date of issuance of the enclosed wage schedule.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project for which it has been issued.
- Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project.

NOTICE TO CONTRACTORS

- > The enclosed wage schedule, and any updated schedule, must be posted in a conspicuous place at the work site during the life of the project.
- The wages listed on the enclosed wage schedule must be paid to employees on public works projects regardless of whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- The enclosed wage schedule applies to all phases of the project including the final clean-up. Contractors whose only role is to perform final clean-up must pay their employees according to this wage schedule.
- All apprentices must be registered with the Massachusetts Division of Apprentice Training in order to be paid at the reduced apprentice rates. If a worker is not registered with the Division of Apprentice Training, they must be paid the "total rate" listed on the wage schedule regardless of experience or skill level. For further information, please call (617) 727-3486 or write to the Division of Apprentice Training, 399 Washington Street, 4th Floor, Boston, MA 02108

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Workforce Development/Division of Occupational Safety within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

		, 2015
I		
(Name of signatory party) (Title) do hereby state:		
That I pay or supervise the payment of the persons employ on the	yed by	
(Contractor, subcontractor or public body) and that all mechanics and apprentices, teamsters, chauffe said project have been paid in accordance with wages deteof sections twenty-six and twenty-seven of chapter one hu General Laws.	ermined under the provisions	
	Signature	
	Title	

DIVISION OF OCCUPATIONAL SAFETY, 399 WASHINGTON STREET, 5TH FL., BOSTON, MA. 02108

WEEKLY PAYROLL REPORT FORM

			_	1						 	,		 						
Company Name:	Project Name:	Awarding Auth.:	Work Week Ending:	ğ		Employee Name & Address													
						Work Classification						w							
									S										
									. 3		-								
					Hours Worked		Hours Worked		Но		Но				Н				
											₩								
P	S			orked							H								
Prime Contractor	Subcontractor List Prime Co	Empl	Employer Signature: Print Name & Title:	Print													ת		
ontract	ractor me Co	over S	oyer S	Name					S										
or	Subcontractor List Prime Contractor:	onature	gnature	Print Name & Title:	(A)	Tot. Hrs.													
	••		**		(B)	Hourly Base Wage													
					Employ		(C) Health &	Welfare											
					Employer Contrib		(D)	Pension											

Contributions

(F) [B+C+D+E]

(G)
[A*F]
Weekly
Total

Hourly Total Wage (prev. wage)

Amount

Supp. Unemp (E)

NOTE: Every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority.

CITY OF NEWTON

SUMMARY OF WORK AND SPECIFIC REQUIREMENTS OF THE CONTRACT

FOR PUBLIC WORKS CONSTRUCTION

A. SUMMARY OF WORK

- 1. The work under this contract is for the full reconstruction of the existing bituminous surfaced tennis court system including access walkways and perimeter fencing at Newton South High School.
- 2. All other work described in the Project Manual and/or shown on the Plan(s) unless specifically indicated as not to be done.
- B. In addition the work under the contract includes:
 - 1. Work outside the Project Site as called for in the Project Manual and/or Plan(s) and as required for the performance of the work.
 - 2. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
 - 3. All labor, materials, tools, and equipment necessary to do all the work required for the completion of each item as specified, which shall limited not only to the exact intent mentioned, but shall include incidental work necessary or customarily performed for the completion of that item.
 - 4. All items not specifically mentioned or noted in the Project Manual and/or Plan(s), but which are obviously necessary to make a complete working installation.
- C. The Proposed Contract Price shall be complete costs, including overhead, profit, insurance, transportation, and all other costs connected with, or incidental to the work described.

II. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- A. Upon notification the Contractor shall commence the work specified in the Project Manual as directed by the City. The work shall proceed in a continuous uninterrupted fashion with adequately staffed crews, in a satisfactory manner, which will assure that the work is completed in a timely manner to the satisfaction of the City.
- B. The time for substantial completion pursuant to Article 2 of the Contract shall:

(Continued on next page)

NOTICE: * TIME IS OF THE ESSENCE *

Within five (5) business days of the Notice Of Award the Contractor shall submit to the Purchasing Department:

- A signed contract.
- A Certificate of Insurance (naming the City as an additional insured)
- A Labor and Materials Payment Bond and a Performance bond each in the amount of 50% of the contract total.

Anticipated start date is August 15th, 2015. Time for completion is seventy five (75) calendar days from the date of the Notice To Proceed.

Time is of the essence for the completion of this contract. If the Contractor fails to achieve substantial or final completion of the Work within the time required by the contract, and unless an extension of time is granted, the Contractor shall pay to the City as liquidated damages, the applicable amount specified in Article 7 of the General Conditions for each day of delay. If different completion dates are specified in the Contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.

III. INSURANCE REQUIREMENTS

- A. The Contractor shall carry and maintain until acceptance of the work such Workmen's Compensation, Automobile Liability, Public Liability, Contingent Public Liability, Property Damage and Contingent Property Damage Insurance, each including blasting coverage, as shall protect him and any sub-contractor performing work covered by this contract from all claims and liability for damages for personal injury, including accidental death, and for property damage which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or by any one directly or indirectly employed by either of them.
- B. The City shall be named as an additional insured on such policy.
- C. The amounts of such insurance shall be as follows:
 - 1. Workmen's Compensation Insurance as required by Massachusetts General Law.
 - 2. Automobile Liability Insurance on all vehicles owned or hired for a.) Bodily Injury in an amount not less than \$500,000.00 for each occurrence, and not less than \$1,000,000.00 aggregate; b.) Property Damage in an amount not less than \$250,000.00 each occurrence, and not less than \$500,000.00 aggregate.
 - 3. Public Liability Insurance and Contingent Public Liability Insurance in an amount not less than \$500,000.00 for injuries, including accidental death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of one accident.
 - 4. Property Damage Insurance and Contingent Property Damage Insurance in an amount not less than \$250,000.00 on account of one accident, and in an amount of not less than \$500,000.00 on account of all accidents.
 - 5. General Liability Insurance shall include Contractual Liability Insurance.
- D. Before any work is started, the successful bidder shall be required to file with the Chief Procurement Officer certificates of insurance coverage as detailed above, with policy numbers and dates of expiration.

E.	The Contractor shall indemnify, hold harmless and defend the City and its departments, officers, employees,
	servants, and agents from and against all actions, causes of actions, claims, demands, damages, costs, loss of
	services, expenses and compensation, including attorney's fees and interest arising out of or resulting directly
	or indirectly from the services rendered pursuant to this Contract, provided that any such action, cause of
	action, claim, demand, damage, cost, loss of service, expense, compensation (1) in any way grows out of
	bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, which (2) is caused
	in whole or in part by any act or omission of the Contractor, anyone directly or indirectly employed by any of
	them or anyone for whose acts any of them may be liable, regardless of whether or not it is cased in part by a
	party indemnified hereunder.

END OF SECTION

The Contractor shall insert prices for each item in ink, in both words and figures, and is to show a total bid price. In the event a discrepancy between the written words and figures, the written words shall govern. In the event an error in the bidders total bid price, the corrected total bid obtained by the summation of the products of the unit prices multiplied by the respective quantities shall stand as the bidder's total bid price.

The Contractor is required to review any related plans, conduct a full site review, and read all the provisions in the document before inserting prices, and is further advised to make his own determination as to the accuracy of the estimated quantities before inserting bid prices.

The estimated quantities shown here are based solely upon a reasonable assessment of the project parameters, thus the Contractor is advised that the actual quantities may vary substantially as field conditions may warrant.

THE CONTRACTOR SHALL DEMONSTRATE AT LEAST TEN YEARS EXPERIENCE BUILDING AND CONSTRUCTING TENNIS COURTS IN THE COMMONWEALTH OF MASSACHUSETTS. ALL EXAMPLES OF COURT CONSTRUCTION SHALL BE SUBMITTED WITH THIS BID. FAILURE TO DO SO MAY RESULT IN THE INVAILDATION OF THIS BID.

THE CONTRACTOR SHALL BEGIN WORK NO EARLIER THAN AUGUST 15^{TH} , 2015.

THE CONTRACTOR SHALL NOT INTERFER WITH ANY SCHOOL OPERATIONS.

CORI and SORI checks shall be completed by the Contractor or sub-contractor on <u>all</u> <u>employees</u> on-site at any Newton Public School (NPS) location prior to their starting date as outlined in the Commonwealth of Massachusetts Education Reform Law of 1994. CORI and SORI check results must be submitted to NPS prior to the start of the Contractor's employee(s) start date of any work to be performed on school grounds.

SECTION 1

ITEM 1 – MOBILIZATION (LAYOUT SERVICES, PHOTO RECORD, CONFERENCES, NOTIFICATIONS, ADMINISTRATION)

Description

- (a) Under this item the Contractor shall extract, correlate, and subsequently post the layout and design grades shown on the plan(s). IMPORTANT: The Contractor is responsible for verifying the accuracy of the plan information by performing a field check between the benchmark and the successive grade points prior to locating and posting any design grades. The contractor is hereby notified that all existing benchmarks are located within the project limits. It is the contractor's responsibility to relocate those bench marks to a safe reproducible area. All layout information is available upon request.
- (b) The Contractor is to make a video tape and/or photographic record as may be required as the construction activities progress, for the purpose of documenting all decrepit, and/or extraordinary points of concern. All video and picture making shall be done on foot and shall not be 'shot' from a vehicle.
- (c) The Contractor is to coordinate and make accommodations for all work performed on private property in the execution of this contract, and is to further coordinate, arrange and/or make accommodations for the performance of all second party utility work which may be required in order to complete the work required under this contract.
- (d) The Contractor is responsible for the scheduling and coordination of all Police services under this item, however the actual cost of Police Services will be paid for under **the appropriate item in this contract**.
- (e) Under this item the Contractor will be required to attend informational meetings, typically one for the general public when deemed necessary, and several with the City of Newton administration in order to discuss and subsequently address all points of concern, including but not limited to a Preconstruction Conference and Progress Conference(s) and inspection walk-throughs.
- (f) Under this item the Contractor is responsible for processing all the necessary paperwork in the execution of this contract, as well as providing and distributing, on a format pre-approved by the Engineer, informational fliers and/or verbal notifications to abutters and/or other concerned parties, to convey important messages as the project commences and as it progresses and such work shall be undertaken and completed at the direction of the Engineer.
- (g) Under this item the Contractor shall comply with all special procedural and/or other site specific directives as stipulated on the plan(s) to ensure a structured and efficient execution of this contract. In addition, and from time to time, the Contractor shall also be required to accommodate and comply with other special requests so that the needs of the general public, abutters, and/or other City of Newton agencies are addressed swiftly and appropriately.

Method of Compliance

(h) <u>IMPORTANT: The Contractor is responsible for verifying the accuracy of the</u> <u>plan information with regard to both the layout stationing and for the grade assigned to the</u> <u>benchmark points by performing a field check between successive points prior to locating and posting any design grades.</u>

The grade points shall be posted throughout the project site on sturdy colorized four foot (4') high iron pins and/or stakes such that the final build-out, once completed, fully complies with the design scheme and/or with any modification necessitated by field changes ordered by the Engineer. However, the posting of grades shall not be limited to just the design grades but shall also include the interpolation and posting of intermediate grades and/or the re-posting of certain grades, as may be from time to time required by any interested party in order to successfully investigate and/or otherwise install, to the satisfaction of the Engineer, any drainage, curbing, pavement and/or any other grade dependent project related component or grade dependent issue.

- (i) The Contractor shall coordinate the grading and layout activities with the Engineer to ensure that the design grades are posted in an expeditious and acceptable manner. To that end the Contractor shall supply and install, at all critical grade points identified on the plan (and/or profile), as many sturdy pins and/or stakes as he deems necessary, or as otherwise may be required by the Engineer. The pins and/or stakes, once set, shall be clearly marked with paint and flagging such that their physical location, as well as the posted grades, can be easily seen by the general public and by the field personnel. Subsequently, once the pins and/or stakes have served their purpose, they shall be immediately removed by the Contractor in their entirety.
- (j) The Contractor is to coordinate with the Engineer in making a video tape and/or photographic record of all existing conditions and/or points of concern prior to the commencement of construction activities, or as otherwise may become necessary as the construction activities commence, for the purpose of documenting all decrepit, and/or extraordinary points of concern or interest. This video record shall be made by the Contractor and a copy, or a secondary video tape, shall be delivered to the Engineer.
- (k) As the project commences the Contractor may opt to make a photographic record in lieu of a videotape but only to supplement the preconstruction sideline video survey, and only when a photographic record is deemed necessary and sufficient by the Engineer and/or the Contractor.
- (l) Videos and/or photographs are to be taken and delivered to the Engineer in such a manner that the subject matter can be clearly seen, and in such a timely manner that the collected information is not lost. The video and/or photographs are to be made on foot via a hand-carried camera. No digital pictures shall be allowed. Only conventionally developed film is to be used.

Method of Compliance (Continued)

- (m) The Contractor is to give ample notice prior to performing certain extraordinary construction related activities on private lands (i.e. walls, steps etc.), and/or is to discuss, and/or is to make safe and reasonable accommodation of access, for all private property abutters affected by the scheduled construction activities at hand. In certain cases the Contractor will be further required to make special accommodations for the handicapped or for other physically challenged or sensor impaired individuals who live in or about the construction area so that their needs may be appropriately addressed. Notice of intent to construct or to disturb private property and/or access routes shall be made at least twenty four (24) hours in advance of the scheduled activity and/or as directed by the Engineer. This notification shall be made in writing on a format acceptable to the Engineer, with said notices being posted at the subject address in a location nearest to the regular mail delivery location. The decision to post notices will be at the discretion of the Engineer in the field.
- (n) Under this item the Contractor shall comply with all local, state and Federal laws.
- (o) Under this item the Contractor shall continually coordinate with the Engineer for the purpose of verifying and/or approving all demolition/excavation/disposal quantities, and/or for having all newly delivered/installed material(s) quantified before, during and/or after their installation. No quantities shall be paid unless verified and/or approved by the Engineer.

Method of Measurement

(p) The Engineer shall make **percentage payments** as he deems appropriate during the course of these activities.

Basis of Payment

(q) Under **Item 1** the Contractor will be paid the **lump sum** price for all labor and materials required to complete these tasks throughout the entire term of the project. Item 1 shall not exceed more than five percent (5%) of the total contract cost. Failure to meet this requirement may result in the rejection of the bid.

SECTION 2

- ITEM 2 REMOVE & DISPOSE OF THE EXISTING CHAIN LINK FENCE SYSTEM (INCLUSIVE OF COMPACTING THE RESIDUAL APERTURES)
- ITEM 3 REMOVE & DISPOSE OF AN EXISTING NET POST & NET POST FOUNDATION

 (INCLUSIVE OF COMPACTING THE RESIDUAL APERTURES)

Description

- (a) Under **Item 2** the Contractor shall remove and immediately dispose of, in its entirety, the existing tennis court (perimeter) chain link fence system inclusive of the concrete footings, and shall simultaneously backfill and compact the residual apertures that will necessarily result in the execution of this work.
- (c) Under **Item 3** the Contractor shall remove and immediately dispose of, in its entirety, an existing tennis net post and its respective sub-surface net-post foundation, and shall simultaneously backfill and compact the residual aperture that will necessarily result in the execution of this work.

Materials

(d) **Gravel** for refilling a residual aperture shall be 'run-of-the-bank' gravel containing no stone larger than three (3) inches in diameter and shall be free from roots, or other foreign matter, but having a binding quality that will compact to a ninety-five (95) per cent compaction requirement or otherwise **dense graded crushed stone** shall conform to Division III, Materials, subsection M2.01.7 of the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highway and Bridges, dated 1988. All gravel and dense graded crushed stone shall be subject to the approval of the Engineer.

Method of Construction

(e) Under **Items 2 and 3** the Contractor shall strategically and systematically dismantle the applicable site amenities such that at the end of each workday the site is clear of all residual waste materials generated by these activities and all residual apertures have been carefully backfilled and compacted with suitable gravel and/or dense graded material. To that end the Contractor shall ensure that any unsuitable material which has fallen and/or has shed into the aperture as a result of the removal activities, has been thoroughly cleared prior to the refilling of the aperture.

Method of Construction (Continued)

- (f) The backfilling and compacting of the apertures, generated under these activities, shall occur on the day they are created, with each aperture being compacted in six (6") lifts with the use of adequately sized tamping bits and pneumatic hammers. At the Engineers discretion the Contractor may be allowed to use other hand operated compaction units for the work to be performed under **Item 3** and then only if the Engineer deems the proposed means of mechanical compaction to be suitable for the task at hand.

 However, in all cases, the Contractor is solely responsible for achieving 95% density compaction requirements so that no settlements occur subsequent to these activities. In the event settlements do occur within two years from the date of the Final Payment (for the entire project) then the Contractor shall repair such failed areas and shall subsequently sealcoat and stripe the entire tennis court surface area and at no expense to the City.
- (g) The excavation and disposal of fence post footings, utility structures and/or net post and the associated net post foundations, shall include the removal and immediate off-site disposal of all masonry, castings, and deleterious materials, in their entirety, as none of the structural remnants and/or associated materials generated by these activities shall be used in the backfilling of the aperture.

Method of Measurement

- (h) Under **Item 2** the Contractor will be paid the contract **lump sum** price for the complete systematic removal and immediate off-site disposal of the existing (tennis court perimeter) chain link fence system, inclusive of the concrete footings, and for the subsequent compaction of the residual apertures.
- (i) Under **Item 3** the Contractor will be paid the contract price for the complete systematic removal and immediate off-site disposal of **each** net post in combination with the respective net post foundation, and for the subsequent compaction of the residual apertures.

Basis of Payment

- (k) Under **Item 2** the Contractor will be paid the contract **lump sum** price for the complete systematic removal and immediate off-site disposal of the existing (tennis court perimeter) chain link fence system, inclusive of the concrete footings, and for the subsequent compaction of the residual apertures, which unit price shall include full compensation for all labor, materials, tools, disposal costs, equipment and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.
- (l) Under **Item 3** the Contractor will be paid the respective contract price for the complete systematic removal and immediate off-site disposal of each existing utility structure (catchbasin and/or manhole), inclusive of any deleterious material(s) or for the complete systematic removal and immediate off-site disposal of **each** net post in combination with the respective net post foundation, which unit price shall include full compensation for all labor, materials, tools, disposal

Basis of Payment (Continued)

costs, equipment and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.

- (m) Gravel furnished from outside the site and used, at the direction of the Engineer, to backfill the selected residual apertures shall be paid for under **Item 6.**
- (n) Dense graded crushed stone furnished from outside the site and used, at the direction of the Engineer, to backfill the selected residual apertures shall be paid for under **Item 7**.

SECTION 3

ITEM 4 – EXCAVATE & DISPOSE OF UNDESIRABLE MATERIAL

Description

- (a) Under this item the Contractor shall excavate and immediately dispose of all unsuitable and/or undesirable material(s), which, in the opinion of the Engineer, is not to be reused on-site, but which is to be otherwise immediately, legally and properly disposed of, at an off-site location, at the Contractors own expense. The work under this item is exclusive of the removal and disposal of the existing fencing, utility structures and/or net post and foundations which are to be paid for under separate items of this contract.
- (b) Under this item the excavation and disposal thereof to subgrade, over the entire limits of the proposed tennis court system, walkways, parking areas and/or other field-defined surface as directed by the Engineer shall be performed by the Contractor and such work shall be limited to the actual volume of each designated area to be excavated as measured prior to the removal of the undesirable material. However in no case is the excavation to exceed such depths and limits as pre-approved by the Engineer.
- (c) The Contractor is not to refill any excavated area until such time as he has notified the Engineer that such excavation has occurred, and is to further work with the Engineer to verify the volume of the excavated area(s). Only confirmed and verified quantities shall be paid.
- (d) Excavation shall include the removal and disposal of pavement, soil, brush, trees under six (6) inches in diameter, boulders less than one-half (1/2) cubic yard in volume, deleterious material(s) whatever their nature may be, peat, mud, grass, or any other type of soil which the Contractor is directed to be remove **which is not specifically covered under any other item**.

Method of Construction

(e) In the event that the Engineer declares that the material encountered at or below sub-base is unsuitable material on which to build the proposed structure, then the Contractor shall excavate to such greater depths as the Engineer may decide and no extra compensation shall be allowed other than the regular unit price quoted in the proposal for this type of excavation in combination with its associated disposal cost. Only the actual amounts of excavation shall be paid for regardless of the depth involved

- (f) The excavation shall be at the prescribed depth below and parallel to the finished grade and left in an evenly graded condition. All work mentioned in this paragraph shall be done before the gravel base course is installed.
- (g) Any newly excavated area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers.

Method of Measurement

(h) Measurements taken for payment shall be by the **cubic yard** to the horizontal and vertical payment lines as pre-approved by the Engineer during the course of this phase of the construction activities and then only for such quantities which have been verified by the Engineer.

Basis of Payment

- (i) Under Item 4 the Contractor will be paid the contract unit price per cubic yard for the excavation and immediate disposal of surface material(s)which have been declared unsuitable and/or undesirable by the Engineer, and which are not to be reused but are to be legally and properly disposed of at an off-site location by the Contractor, which unit price shall be full compensation for all labor, tools, equipment and all incidental work necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.
- (j) The work to be completed under **Item 4** does not apply to the removal and disposal work associated with the existing fencing, utility structures and/or net post and foundations which shall be paid under applicable **Item 2, & 3** of this contract.

ITEM 5 - GRAVEL FURNISHED FROM OUTSIDE THE SITE

ITEM 6 - DENSE GRADED CRUSHED STONE

Description

- (a) Under **Item 5** and **Item 6** gravel and/or dense graded crushed stone used to complete the work of this contract shall be furnished from an off-site source and it shall be subsequently installed under these items.
- (b) The depths of the furnished gravel base course may vary substantially depending on the discovery of the existing soil conditions.
- (b) The depths of the dense graded material shall be typically two inches (2") in depth as stipulated on the plans or as otherwise directed by the Engineer.

Materials

(d) Gravel shall be 'run-of-the-bank' gravel containing no stone larger than three (3) inches in diameter and shall be free from roots, or other foreign matter, but having a binding quality that will compact to a ninety-five (95) per cent compaction requirement. Dense graded crushed stone shall conform to Division III, Materials, subsection M2.01.7 of the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highway and Bridges, dated 1988. All gravel and dense graded crushed stone

shall be subject to the approval of the Engineer. All subsequent references to gravel in this section shall also apply to dense graded crushed stone.

Method of Construction

- (e) In the case of backfilling apertures the gravel shall be rammed using pneumatically powered tamping bit equipped hammers, hand operated 'jumping-jack' reciprocating single shoe plate compactors, vibratory plate compactors, any and all of which shall meet with the approval of the Engineer in accordance with the task(s) at hand, or the gravel used for the preparation of surface(s) shall otherwise be spread from self-spreading vehicles, or with power graders of approved types or by hand upon the prepared sub-base. Care shall be taken while spreading the gravel to rake forward and distribute the largest stone, so that they will be at the bottom of the gravel course and be evenly distributed.
- (f) The gravel so placed shall be thoroughly rolled true to the lines and grades, as directed, with a self-propelled three (3) wheeled roller or tandem roller weighing not less than twelve (12) tons until it presents a firm, stable and unyielding surface, and until it ceases to creep under the wheels of the roller. Any depressions that appear during or after rolling shall be filled with gravel and re-rolled until the surface is true and even.
- (g) Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers.
- (h) Compaction shall be carried on until the density of the material is not less than ninety-five (95) per cent of the Standard Proctor Density as determined by Standard Laboratory Compaction Test. As directed by the Engineer the Contractor shall arrange and submit to the Engineer results of such tests taken in such number as to indicate a test of every eight hundred (800) square feet of compacted area.
- (i) No lift of freshly placed material shall exceed six inches (6") in depth.
- (j) The gravel base course shall be fine graded and rolled to a true grade, the prescribed number of inches in depth, and parallel to the finished grade of the proposed surface. The Contractor shall, when the Engineer orders to do so, place iron pins or stakes along the edge of the proposed surface area, the edge of the various surfaces, or wherever he may decide, and mark the necessary grades thereon. The Contractor shall supply all the labor and material necessary to accomplish this task.

Method of Measurement

- (k) Measurement taken for **Item 5** shall be by the **cubic yard, complete in place** for reasonably dry material as delivered to the site and which is subsequently placed.
- (l) Measurement taken for **Item 6** shall be by the **cubic yard**, **complete in place** for reasonably dry material as delivered to the site and which is subsequently placed.

Basis of Payment

(m) Under **Item 5** the Contractor will be paid the contract unit price **per cubic yard** for furnishing and placing gravel, which unit price shall include full compensation for, and for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

- (o) Under **Item 6** the Contractor will be paid the contract unit price **per cubic yard** for furnishing and placing dense graded crushed stone, which unit price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.
- (o) The excavation and disposal of undesirable/unsuitable soil material shall be paid for under **Item 4.**
- (q) The redistribution and/or the regrading of salvaged loam shall be paid for under **Item 18**.

ITEM 7 – INITIAL PREPARATORY GRADING & GEOTEXTILE FABRIC (INSTALLED UNDER THE COURT AREA ONLY)

Description

(a) Under this item the contractor shall, after demolition operations are completed, prepare and grade the proposed two-court tennis system. The exposed sub-grade surface shall be initially graded and the Contractor shall subsequently furnish and install the woven polypropylene geotextile fabric, as shown on the plans and as specified herein, for the purpose of stabilizing the soils. This work is to be done only after all residual apertures have been fully compacted and brought to subsurface preparatory grade. The Contractor shall install all proposed fence posts, net posts and foundations, and new catchbasin/subsurface structures in a manner which does not adversely affect the integrity of the geotextile fabric.

Materials

- (b) The woven polypropylene geotextile fabric is to be **Mirafi 600-X** or an approved equal, and is to be new and unused and is to be delivered to the site in the original factory wrap.
- (c) Fabric (or an approved equal fabric shall) conform to the following minimum standards and criteria:
 - Complies with AASHTO M288-96 Specifications for Stabilization and Separation Class 1.
 - Grab tensile strength shall conform to ASTM D-4632 @ 315 pounds
 - Grab Tensile Elongation ASTM D-4632 with a Machine Direction/Cross Machine Direction (MD/CD) ratio equal to 15/10.
 - Trapezoid Tear Strength ASTM D-4533 @ 120 pounds.
 - Mullen Burst Strength ASTM D-3786 @ 600 psi.
 - Puncture Strength ASTM D-4833 @ 120m pounds.
 - Ultra-Violet Resistance after 500 Hours ASTM D-4355 @ 70% Strength.
 - Apparent Opening Size ASTM D-4751 @ 40 US Sieve
 - Permittivity ASTM D-4491 .05 sec -1

Method of Construction

(d) The exposed subgrade shall be graded parallel to the proposed finish surface, and thoroughly rolled true to the proposed lines and grades, with a self-propelled three (3) wheeled roller or tandem roller weighing not less than twelve (12) tons until the graded surface presents a firm, stable and unyielding surface until it ceases to creep under the wheels of the roller. Any depressions that appear during or after rolling shall be filled with gravel and/or dense graded stone as directed by the Engineer.

- (e) Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers.
- (f) Compaction shall be carried on until the density of the material is not less than ninety-five (95) per cent of the Standard Proctor Density as determined by Standard Laboratory Compaction Test. As directed by the Engineer the Contractor shall arrange and submit to the Engineer results of such tests taken in such number as to indicate a test of every eight hundred (800) square feet of compacted area.
- (g) The exposed subgrade base course shall be fine graded and rolled to a true grade and parallel to the finished grade of the proposed surface. The Contractor shall, when the Engineer orders to do so, place iron pins or stakes along the edge of the proposed surface area, the edge of the various surfaces, or wherever he may decide, and mark the necessary grades thereon. The Contractor shall supply all the labor and material necessary to accomplish this task.
- (h) The fabric material is to be carefully handled to prevent sagging and to prevent any undue stresses from occurring in the fabric prior to its installation.
- (i) The fabric is to be carefully cut by razor and shall be installed in such a manner that the seams are kept to a minimum. To that end the Contractor shall carefully plan the installation of the fabric such that the maximum length and width of the fabric is utilized. **All overlaps are to be a minimum of two (2) feet in every direction**, and are to be installed so that the entire surface area of the fabric remains flat during the placement of the gravel fill.. No bunching up of the material will be allowed.
- (j) Apertures for fence posts and/or net posts are to be neatly cut by razor in such a manner that the fabric is tightly fitted against the post.

Method of Measurement

(k) Measurement taken for payment shall be by the **square yard** for the footprint of the graded area, which unit price shall be inclusive of furnishing and installing the geotextile fabric.

Basis of Payment

(l) Under **Item 7** the Contractor will be paid the **square yard** contract price for grading the subgrade/base course material, **which unit price shall include furnishing and installing the woven polypropylene geotextile fabric,** complete-in-place, and for all labor, materials, tools, equipment, and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.

ITEM 8 – TENNIS NET POST & FOUNDATION

ITEM 9 – CINCH STRAP & FOUNDATION

ITEM 9A – TENNIS NET

Description

a) Under **Item 8** the Contractor is to furnish and install new tennis posts and foundations, as shown on the plan and as specified herein.

- b) Under **Item 9** the Contractor is to furnish and install new cinch strap units and foundations, as shown on the plan and as specified herein.
- c) Under Item 9A the Contractor is to furnish and install new tennis nets, as shown on the plans and specified herein.
- d) Materials
- e) Materials shall be of the type shown on the plans or as otherwise approved. (The Contractor is advised that each tennis court will require one matched set of tennis net posts. i.e. one anchor post and one crank post.)
- f) Foundations shall be of fully formed 3,000 psi transit mixed concrete.
- g) The Contractor shall assign and deliver all manufacturer's warranties to the City of Newton Parks and Recreation Department.
- h) **Tennis nets** shall be **Nova Ultimate DUCK-TOP Fitted Tennis Net, Model 2185:** by Nova Sports U.S.A. of Milford, Massachusetts OR approved equal.

Method of Construction

- i) The Contractor shall install the equipment in the manner, to the dimensions, and in accordance with the manufacturer's directives, or as otherwise shown on the plans and as specified herein.
- j) Net post foundations must be formed, or if allowed by the Engineer they may otherwise be installed as a 'spread-footing', however any method of installation undertaken by the Contractor must ensure, that once set, the net post assembly is rendered immovable when the cable supporting the tennis net is placed under its normal working tension.
- k) Cinch strap foundations are to be hand-dug and are not to be formed and must ensure, that once set, the cinch strap foundation and assembly, when placed under its normal working tension, is immovable.

Method of Measurement

- 1) Measurement taken for payment shall be for **each** tennis net post, in combination with it's respective foundation, complete-in-place.
- m) Measurement taken for payment shall be for **each** cinch strap unit, in combination with it's respective foundation, complete-in-place.
- n) Measurement take for payment shall be **for each** tennis unit, complete-in-place.
- o) Basis of Payment
- p) Under **Item 8** the Contractor will be paid the contract unit price for **each** tennis net post with the associated foundation complete-in-place, including all necessary hardware and assembly, which price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item and in accordance with the specific directives unique to the site, as shown on the plans, as directed by the Engineer, and as specified herein.
- q) Under **Item 9** the Contractor will be paid the contract unit price for **each** cinch strap assembly with the associated foundation complete-in-place, including all necessary hardware and assembly, which

price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item and in accordance with the specific directives unique to the site, as shown on the plans, as directed by the Engineer, and as specified herein.

r) Under **Item 9a** the Contractor will be paid the contract unit price for **each** tennis net, including all necessary hardware and assembly, which price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item and in accordance with the specific directives unique to the site, as shown on the plans, as directed by the Engineer, and as specified herein.

SECTION 9

ITEM 10 – FURNISH AND INSTALL 10' HIGH P.V.C. COATED CHAIN LINK FENCE SYSTEM (INCLUSIVEOF FRAMEWORK, FOOTINGS, FABRIC AND GATES)

Description

- (a) Under **Item 10** the Contractor shall furnish and install a **ten foot (10') high steel framed <u>black</u> polyvinyl chloride coated fence** system complete with gates in the locations shown on the plans and as specified herein..
- (b) All materials and components are to be new and unused.
- (c) Manufacturer's warranties are to be assigned and delivered to the City of Newton.

Materials

- (d) Posts, Braces, Rails and Fittings:
- Line, corner and terminal posts, top, bottom and intermediate rails shall be Schedule 40 primed galvanized steel, meeting ASTM A-123 standard, with a 10-14 mil bonded (black) polyvinyl chloride (PVC) coating.
- The base metal for the manufacture of posts, rails and braces shall conform to the requirements of ASTM-F 1083, steel pipe Type I, except that the carbon content of steel posts shall not be more than 0.40 percent. Steel made by the oxygen furnace process will be acceptable. Posts, rails and braces shall be galvanized in accordance with the requirements of ASTM Designation: A123. The weight of the zinc coating for pipe shall be not less than 2.0 ounces per square foot of metal surface.
- Line posts shall be two and a half (2-1/2) inch O.D. pipe and equally spaced along each run, however at not more than ten (10) foot intervals, measured from center to center of posts. All posts shall be set in a true vertical position. All posts shall have continuous horizontal braces at the top and bottom. In addition, all end and corner posts shall be braced to the nearest line posts with center brace rails. The line between the center of the top of any given post and the center of that same post at the finished ground line shall be plumb within a tolerance not to exceed 0.02 foot in 10 feet. Horizontal members shall not deviate more than 0.01 foot from the grade established by the Engineer.
- Corner posts shall be braced in each direction by 1-5/8" OD pipe rail.

- Rails and braces shall be 1-5/8" OD primed galvanized steel pipe with a polyvinyl coating supplied in twenty-one (21) foot lengths, and joined by six (6) inch long polyvinyl (PVC) coated sleeves, that is to run continuously along the top of the fence. Rails shall be securely fastened to terminal posts by vinyl clad pressed steel fittings.
- All posts shall be fitted with watertight tops designed to fit securely over the posts.
- The rails and fittings shall be of the same color and coating as the framing members.

(e) Gates

- Gate posts shall be four (4) inch O.D. pipe. End and corner posts shall be three (3) inch O.D. pipe. All posts shall be fitted with watertight tops designed to fit securely over the posts.
- The gate frame shall be schedule 40 galvanized steel, meeting ASTM. A-123 standard, with a 10-14 mil bonded polyvinyl chloride coating. The gate system, regardless of size, shall be fabricated of sufficiently sized, and sufficiently braced framing material such that the gate frame retains its true square and dimensional form, in all types of inclement weather conditions such that the serviceability of the gate is never impaired.
- The drop bar locking device for double hung gates shall be provided with a six (6) inch diameter, twelve (12) inch deep footing of Class B concrete, crowned at the top and provided with a hole to receive the locking bar.
- The framing members and fabric for the gates shall be the same as the framing members and fabric for the fence.
- Gate Double Latch Malleable iron drop bar type securely bolted to gate frame to engage a heavy malleable iron-gate anchor in concrete footing with a locking device suitable for padlocking. Latches shall be industrial type cargo spring back latches.
- Gate Hinges Malleable iron offset type, allowing gates to swing back parallel with line of fence.

(e) Fabric:

- The fence fabric shall be a woven two inch (2") mesh manufactured from a 9 gauge (0.148" O.D.) wire core having a minimum tensile strength of 90,000 psi and coated with a 0.022" thick bonded plasticized polyvinyl Chloride(PVC) coating that has been permafused bonded to the primed galvanized steel wire core to yield a total six (6) gauge (0.192" O.D.) and conforming to the specifications of ASTM-F668, Class 2-b. The fabric shall have a knuckled finish on the top and bottom edges.
- Fabric shall be attached to the top rail, line posts and braces, by means of a double wrap of 9 gauge (black) polyvinyl coated steel **wire ties** equally spaced at a minimum of 12" intervals securely fastened to the posts in a responsible manner so the ends of the ties are turned inward towards the fence.
- Rolls of wire fabric shall be joined by weaving a single strand into the ends of the rolls to form a continuous mesh.

• 1/4" by 3/4" **stretcher bars**, located only at the-end-of-the-run posts, shall be fastened to the end and corner posts with bands not less than 1/8" thick by 3/4" wide and spaced equally in increments not to exceed one foot intervals. Stretcher bars shall be 1 inch less than the full height of the fabric with which they are to be used.

(f) Footings:

- 3,000 PSI cement concrete footings shall be fourteen inches (14") in diameter for line posts and twenty inches (20") in diameter for corner and gate posts and each footing shall be set no less than four (4) feet below finished grade. The cost of such footings shall be incorporated into the unit cost of this item.
- The post hole shall be dug either by hand or by auguring, and shall be of uniform in size, clean and dry. The concrete shall be deposited in the hole without forms.
- Where solid rock is encountered without an overburden of soil, line posts shall be set a minimum depth of eight (8) inches, and end, corner, gate and intermediate posts a minimum of twelve (12) inches into the solid rock. The hole shall have a minimum width or diameter of one inch greater than the largest dimension of the post section to be set. The posts shall be cut, before installation to lengths which give the required length of post above ground, or if the Contractor so elects he may use an even length of post set at a greater depth into the solid rock. Grouting will be required on the portion of the posts in solid rock.
- (g) Surplus excavated material remaining after the fence has been constructed shall be disposed of off-site as directed by the Engineer and paid for under this item.

Method of Measurement

(h) Measurement taken for payment shall be by the **linear foot** for the entire fence system complete-in-place, inclusive of, but not limited to, the gate systems, footings, latches, fittings, ties and the disposal of all displaced surplus material.

Basis of Payment

(i) Under **Item 10** the Contractor will be paid the contract unit price **per linear foot** for the entire fence system, complete-in-place, inclusive of, but not limited to, the fabric, gate systems, footings, latches, fittings, ties and the disposal of all displaced surplus material which price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer, and as specified herein.

ITEM 11 – 3" TYPE I-1 BITUMINOUS CONCRETE FOR TENNIS COURT PAVEMENT (INSTALLED AFTER THE FENCE & NET POSTS HAVE BEEN INSTALLED)

Description

(a) Under **Item 11** bituminous concrete tennis court playing surfaces, parking area and driveway entry apron respectively shall be constructed in the manner and in the locations shown on the plans and/or as directed by the Engineer.

Materials

- (b) This type of pavement shall be composed of mineral aggregate, mineral filler and bituminous material, plant mixed and laid hot. The mixing and materials shall conform to the current specifications as set forth in the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highway and Bridges, Sections 460 and M3, dated 1988 Bituminous concrete Type I-1.
- (c) The initial preparatory grading and geotextile soil stabilization/construction fabric shall be paid for under **Section 5 Item 8.**
- (d) The bituminous concrete shall be laid on a gravel and/or dense graded base course built under **Section 4 Item 6 or Item 7,** whichever is applicable.

Method of Construction

- (e) The Contractor shall stake and grade the entire court area with a sufficient number of stakes such that the design grades can be clearly met. The Contractor is to further stake and/or set any lines, for any critical points of interest that the Engineer may require. Subsequent to their final use the Contractor is to remove all stakes in their entirety. No stake shall be broken off but instead it shall be thoroughly and entirely removed. Equipment and materials utilized by the Contractor to achieve the design grades are subject to the approval of the Engineer.
- (f) The edge of the bituminous concrete pavement tennis court surface built under Item 11 shall be constructed with the use of side forms for the purpose of producing/providing a straight and clean edge. However The Engineer may at any time order the use of forms which shall be of a type subject to his approval. The forms shall be set so that the finished pavement shall be at a true line and grade as determined by the Engineer. The Engineer may in lieu of forms order the use of iron pins with grade marked thereon, so placed that they will not interfere with the travel of the machine spreader, but close enough so that a short straight edge placed on the newly laid pavement can reach a string line tied from pin to pin, and afford a visual check on the thickness of the newly laid pavement. The Engineer may order the pins to be used on the base, binder, or top courses. All expenses involved in the use of pins including the furnishing of such iron pins shall be borne by the Contractor. The forms shall be clean, smooth, free from warp, of sufficient strength to resist springing out of shape and of a depth to conform to the thickness of the bituminous concrete wearing surface. The forms shall be well staked and thoroughly braced and set to the proposed line and grade. The sides when the forms are removed shall present a true line conforming to the line desired
- (g) Bituminous concrete shall only be applied under <u>clear or partly cloudy skies</u> <u>without the threat of rain</u>. The Contractor is not to schedule bituminous pavement application unless such favorable weather conditions are professionally forecast by a recognized weather agency, and at the request of the Engineer, this forecast shall be filed with Engineer in hard-copy form. <u>Further, no bituminous concrete shall be applied upon a residually wet bituminous surface or otherwise upon a saturated soil <u>surface, and in no case shall any bituminous concrete be accepted if it has been prematurely cooled by rain either while on the truck or after it has been applied to the surface at-hand.</u></u>
- (h) The bituminous concrete must be kept clean during hauling and handling and covered if necessary during transit with canvas or other material which will retain the desired pavement temperature. These mixtures must not be hauled in such a manner that segregation of the ingredients takes place, or that a crust is formed on the surface, or that the mixture will crumble or flatten out when dumped. Trucks which transport the mixture shall be tight, and the side of the bodies shall be coated with a thin film of oil, or soap solution. The dispatching of trucks from the distribution point shall be so arranged that all the material which is to be

delivered at or on the road surface during any day may be placed and shall have received final compression before nightfall of the same day.

- (i) The bituminous concrete mixture shall be delivered to the work in such condition that it is easily workable and can be efficiently laid. The mixture shall not be laid upon a wet or damp surface, but shall only be laid on an approved base course which is dry and only when weather conditions are suitable which shall be decided by the Engineer. The temperature of the mixture to be laid shall be between two hundred and twenty-five (225) degrees Fahrenheit and three hundred and twenty-five (325) degrees Fahrenheit and no mixture shall be placed when the air temperature in the shade and away from artificial heat is forty (40) degrees Fahrenheit or less. Variation from these temperatures may be permitted only on written permission of the Engineer.
- (j) Contact surface of curbing, gutters, manholes, etc., shall be painted with a thin coat of hot asphalt cement, just before the bituminous concrete is placed against them. The edge of the asphalt mixture adjacent to rigid curb lines, around manholes, or other solid fixtures or where no shoulder is constructed, shall be hand tamped before being rolled.
- (k) Under **Item 11**, the bituminous concrete shall be laid in the prescribed number of courses as shown on the plans and shall consist of a three (3) inch finished depth of Type I-1 bituminous concrete laid in two (2) courses, a base or binder course of one and three-quarter (1 3/4) inch and a top or wearing course of one and one quarter (1 1/4) inch. All dimensions shall mean the finished depths. The mixture shall be placed from approved dump sheets or wheelbarrows fed directed from trucks. Dumping the mixture directly from trucks on the base will not be allowed.
- (l) After the paving mixture has been properly spread it shall be thoroughly and uniformly compressed by rolling with power rollers. On projects involving less than one hundred and fifty (150) tons of paving mixture per day one (1) tandem roller of not less than ten (10) tons shall be used. On projects using more than one hundred and fifty (150) tons but less than three hundred and fifty (350) tons two (2) rollers shall be required with one (1) additional roller for each two hundred (200) tons of mixture per day thereafter. A day shall be construed as eight (8) hours working time. If, in the opinion of the Engineer, satisfactory compaction is not obtained by rolling with a tandem roller, the Engineer may order the rolling to be done with ten (10) to twelve

Method of Construction (Continued)

(12) ton three (3) wheeled roller with wheels not less than twenty-four (24) inches wide. All rollers used shall weigh at least two hundred and fifty (250) pounds per inch width of tread. Each roller shall be in charge of a competent, experienced roller operator and shall be kept in a nearly continuous operation as practical while the work is under way. The pavement shall be rolled longitudinally, diagonally, and transversely, as directed. Longitudinal rolling shall start at the side and proceed toward the center of the pavement, overlapping on successive trips by at least one-half (1/2) the width of the rear wheel of the roller. Diagonal rolling shall be in two (2) directions, the second diagonal rolling crossing the lines of the first. If the width of the work permits, it shall in addition be rolled at right angles to the center line. This method of rolling shall be continued and so executed that all roller marks, ridges, porous spots and impressions are eliminated, and the resulting surface has the required grade and contour. Rolling shall proceed at a rate not to exceed two hundred and fifty (250) square yards per hour, per roller. To prevent adhesion of the mixture to the roller the wheels shall be kept properly moistened but excess water or oil will not be permitted. Along forms, curb headers and similar structures and all places not accessible with a roller, the mixture shall be thoroughly compacted by tampers. Such tampers shall weigh not less than twenty-five (25) pounds and shall have a tamping face of not more than fifty (50) square inches. The surface of the mixture after compressing

shall be smooth and true to the established crown and grade. Any mixture which becomes loose and broken, mixed with dirt or in any way defective shall be removed and replaced with fresh mixture, which shall be immediately compacted to conform to the surrounding area. Areas of one (1) square foot or more showing an excess of bitumen shall be removed and replaced.

- (m) The densities of the completed pavement shall be not less than ninety-two (92) percent of the calculated density of a voidless mixture composed of the same materials in like proportions. After final compression, samples will be taken from the completed pavements and when tested by standard laboratory methods shall show compliance with aforesaid density requirement.
- (n) The lengths of lanes or strips of bituminous concrete in the base, binder and top courses shall be under control of the Engineer at all times. The practice of laying lanes of bituminous concrete for such lengths that an unduly long period of time elapses before laying adjacent lanes shall not be allowed.
- (o) The finished surface shall present an even texture free from blemishes, ridge marks or imperfect spots and it shall be true as to line and grade. When tested with a sixteen (16) foot straight edge placed parallel with the center line of the surface course there shall be no deviation from a true surface in excess of one-quarter (1/4) of an inch. If any soft or imperfect places or spots develop in the surface, all such places shall be removed and replaced with new material and then rolled until the edges at which the new work connects with the old becomes invisible. All such removal and replacement of unsatisfactory surfacing shall be done by the Contractor without additional compensation.
- (p) The separate courses shall be rolled with a self-propelled equally balanced tandem roller weighing not less than three (3) tons and not more than five (5) tons. In places inaccessible to a power roller, compaction shall be obtained by means of hand tampers.
- (q) The roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the mixture is to be discontinued at the end of the day's operation. In such cases, provisions shall be made for proper bonding with new surface mixture by cutting back over the full width and depth of the course. When laying of the course is resumed, the exposed edge of the joint shall be painted with a thin uniform coat of hot asphalt, just before the new mixture is laid.

Method of Measurement

(r) Measurements taken for payment under **Item 11** shall be **per ton** of bituminous concrete actually used and complete-in-place. The Contractor shall furnish the Engineer with receipts from the plant showing the weight of each load of bituminous concrete furnished and placed, however the Engineer reserves the right to adjust payment in the event the volume of material is either not entirely used or the shipment has arrived on the site as already partially used.

Basis of Payment

- (s) Under **Item 11** the Contractor will be paid the contract unit price **per ton** for the bituminous concrete tennis court playing surfaces, parking area, and driveway entry apron respectively. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidental work necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.
- (t) The initial preparatory grading and geotextile soil stabilization/construction fabric shall be paid for under **Item 7.**

(d) The bituminous concrete shall be laid on a gravel and/or dense graded base course shall be paid for under **Item 5 or Item 6,** whichever is applicable.

ITEM 12 – SEALCOAT & STRIPING OF TENNIS COURT SYSTEMS

Description

- (a) Under this item the court area situated within the perimeter fence shall be seal coated and striped using three different acrylic polymer based products that are to be applied in **four (4) separate operations**. A base coat to serve as a court resurfacer / sealer, a second and third application (i.e. two (2) coats) of the textured colorized sealcoat and the fourth process being the layout and striping of the courts using white textured line marking paint. The courts are to be finished in a two-tone color scheme. **The coloring scheme shall be approved by the owner prior to application.**
- (b) The Contractor, together with the Engineer, shall perform an investigative process immediately after a rain event, but prior to the application of the colorized sealcoat, for the purpose of outlining any areas that will require attention to eliminate puddles. And any puddles found to be deeper than the depth of a U.S. quarter's thickness shall be corrected by the Contractor at his own expense and in a manner acceptable to the Engineer.
- (c) Subsequent to the acceptance of the sealcoat, and only after it has been verified that no standing water and/or puddling is evidenced on the seal coated area, then the Contractor shall layout and install the striping under this item.
- (d) Work under this Item is to be conducted when the air temperature is greater than 50 degrees Fahrenheit and rising and also not during a rain event or when a rain event is imminent.
- (e) The Contractor must show that he possesses the equipment, ability and experience necessary to do this work in accordance with the plans and specifications and to do a workmanlike job.
- (f) Before the Contractor begins work on these courts, and from time to time during construction, the Contractor shall submit to the Engineer for his approval detailed accounts of the methods and materials he intends to use.
- (g) No substitution for the materials specified shall be allowed unless the substituted materials are shown to be equal in all respects to the materials specified.
- (h) The Contractor will be held strictly responsible for a complete watertight workmanlike job.

Materials

- (i) All materials shall conform to these specifications and to such further material specifications and/or directives as shown on the plans.
- (j) All containers of materials for the sealcoating shall be delivered on the site in factory sealed containers. Samples shall be taken as the material is being applied for laboratory tests as may be required.

Materials (Continued)

- (k)All sealcoating and striping material shall be a non-fading weather proof acrylic colored surface and sealer for use on plant mix asphalt/bituminous cement concrete. The colored system must protect the foundation and asphalt surface from fuel, oils, acid, alkalis, solvents, weather, sun, wind and other climatic conditions. The surface shall not peal, crack, craze or chalk. The seal coated surface shall provide a tough durable playing surface that is of uniform texture and shall remain resilient and flexible. The surface shall be water-tight yet have the ability to breathe and allow water vapor to migrate from underlying foundation materials.
- (1) Each component of the three components of the textured color system has its own unique application methodology. Such methodology is strictly based upon the manufacturer recommendations, regardless of the actual textured color system to be applied it shall be the Contractors responsibility to ensure all manufacturer guidelines are adhered to at all times.
- (m) Sealcoat & Striping Materials

BASE COAT (AND LEVELING COURSE)

The Contractor shall allow the new bituminous surface to cure for 30-days before applying the base coat material which shall be LayKold NuSurf (or an approved equal court resurfacer).

As Manufactured By:

As Distributed By:

Advanced Polymer Technology, Inc. 109 Conica Lane, PO Box 160 Harmony, PA 16037 724-452-1330 New England Sealcoating Co. Inc 120 Industrial Park Drive Hingham, MA 02043 781-749-6800

NuSurf is a flexible, 100% acrylic emulsion designed for smoothing new asphalt pavements. NuSurf is to be combined with silica sand and used as a court resurfacer prior to installing the color and striping coats on the court. NuSurf does not contain any asbestos, lead or mercury.

NuSurf is to be mixed according to the following ratios:

- 55 Gallons of NuSurf
- 400-500 pounds of clean silica sand, sized between #60 # 80 sieve sizes

(The sand to be used in all the emulsion shall be free from salt, clay, organic and other foreign matter)

- 25 Gallons of water
- Coverage to be approximately 0.05-0.07 gallons / square yard of NuSurf mixture.

Upon the completion of the Base Coat the Contractor, together with the Engineer, shall perform an investigative process immediately after a rain event, or otherwise by flooding the entire court area at the Contractor's own expense, for the purpose of defining and subsequently outlining any areas that will require attention to eliminate puddles.

Materials (Continued)

Any puddled areas deeper than the depth of a U.S. penny's thickness (approx. one-sixteenth of an inch) <u>shall be corrected by the Contractor at his own expense</u> and in a manner acceptable to the Engineer.

Only Laykold Resurfacer, or other compatible compounds approved by the Engineer in accordance with the 'or equal clause of this contract', shall be used to fill very minor depressions of one eighth inch (1/8") or less by mixing one (1) part of Acrylic Resurfacer to one (1) part #60-#80 mesh silica sand, otherwise depressions of three-thirty seconds of an inch (3/32") or greater shall be corrected using only Laykold Deep Patch and/or Laykold CBM (depression filler mix), or other compatible compounds approved by the Engineer in accordance with the 'or equal clause of this contract'. Each and every compound used as a filler material shall be installed in accordance with the manufacturer's recommendations.

COLORIZED (TEXTURIZED) SURFACE

Subsequent to the LayKold NuSurf base coat application, and only the verification that no standing water and/or puddling exists on the court system and/or upon the completion of any subsequent corrective actions, the Contractor shall apply two (2) coats of DecoColor textured surfacing polymer sealcoat material (or an approved equal textured color surface system).

The colorized sealcoats shall consist of the following compounds;

- **DecoBase I** (**for application of first colorized Texture Course sealcoat**) acrylic texture coating is supplied as an unpigmented concentrate to be tinted with DecoColor MP Classic.
- DecoColor MP Classic (for application of second colorized Texture Course sealcoat) A pigmented latex emulsion liquid coating

As Manufactured By:

As Distributed By:

Deco Surfacing Systems, Inc. A Division of California Products 150 Dascomb Road Andover, MA 01810 800-332-6178 New England Sealcoating Co. Inc 120 Industrial Park Drive Hingham, MA 02043 781-749-6800

For both courses, thorough mixing is required. A mechanical mixer is required and shall be used until such time as a homogeneous mixture has been obtained. Hand mixing will not be allowed under any circumstances. Periodic mixing shall take place as the job progresses to ensure a consistent mix. In very warm conditions more water may be added, and such decision shall be at the discretion of the Engineer.

- Application rate of the first and second Texture Course shall be 0.05 Gallons / Square Yard
- The two (2) Texture Course applications shall be applied perpendicular to one another.
- DecoColor Texture Course applications shall be allowed to dry for a minimum of 4 hours (assuming 70 degrees Fahrenheit and 50% relative humidity) between applications. Low temperatures and high humidity significantly increase drying time.

Materials (Continued)

The first colorized Texture Course shall be applied perpendicular to the Base Coat and shall be mixed in accordance with the following ratios:

- DecoBase I 55 Gallons
- DecoColor MP Classic 15 Gallons
- Clean Potable Water 23 Gallons

The second (and final) colorized Texture Course shall be applied perpendicular to the first colorized Texture Course, and shall be mixed in accordance with the following ratios;

- DecoColor MP Classic 30 Gallons
- Clean Potable Water 20 Gallons

COURT LAYOUT LINES

Court layout lines are to be painted using Hi-Hide Line Paint (or approved equal). Two (2) inch playing lines shall be accurately located, marked and installed by the Contractor in accordance with the latest standards of the U.S. Tennis Association. The colorized surface shall cure for a minimum of forty-eight (48) hours before the lines are painted.

As Manufactured By:

As Distributed By:

Deco Surfacing Systems, Inc. A Division of California Products 150 Dascomb Road Andover, MA 01810 800-332-6178 New England Sealcoating Co. Inc 120 Industrial Park Drive Hingham, MA 02043 781-749-6800

Hi-Hide Line Paint (also referred to as No. 6220 Textured White Line Paint, formally known as 920-22 Striping Paint) is a highly reflective, 100% acrylic, textured marking paint for use over bituminous surfaces for the purpose of striping of color-coated recreational surfaces.

Hi-Hide Line Paint comes ready to apply, only gentle stirring is necessary. **Do not dilute.**

Method of Construction

- (n) NuSurf shall be applied using a soft rubber squeegee. The finished surface is to have a uniform appearance and be free of ridges and tool marks and if more than one application is necessary then successive coats shall be applied perpendicular to the one preceding it.
- (o) DecoColor is to be applied using a 50 durometer rubber squeegee, DecoColor mix is to be applied in one direction and parallel to one of the sides of the playing surface. The finished surface is to have a uniform appearance and be free of ridges and tool marks and if more than one application is necessary then successive coats shall be applied perpendicular to the one preceding it.
- (p) The outside limits of the sealcoat along the fence line, as well as the stripe layout lines, are to approved by the Engineer prior to the application of the Hi-hide Line Paint striping which shall be installed by applying tape along the edge of the sealcoat area or to both sides of the area to be striped as the case may be. Apply a primer coat of the final acrylic color coating which the tape is above to the inside edges of the tape (to seal the tape to the acrylic surface and prevent the striping paint from bleeding under the tape.

- (q) Any puddled areas found to be deeper than the depth of a U.S. penny's thickness (approx. one-sixteenth of an inch) shall be corrected by the Contractor at his own expense and in a manner acceptable to the Engineer. Only upon approval of the Engineer, Laykold Resurfacer may be used to fill very minor depressions of one eighth inch (1/8") or less by mixing one (1) part of Acrylic Resurfacer to one (1) part #60-#80 mesh silica sand otherwise depressions of three-thirtysecondths of an inch (3/32") or greater shall be corrected using only Laykold Deep Patch of Laykold CBM (depression filler mix).
- (r) The entire sealcoating operations shall be done under the direct supervision of the manufacturer's representative, and in all cases the Contractor shall strictly adhere to the manufacturer's recommended installation procedures, a copy of which the Contractor shall supply to the Engineer prior to the outset of these operations.
- (s) Work under this Item is to be conducted when the air temperature is greater than 60 degrees Fahrenheit and rising and also not during a rain event or when a rain event is imminent.
- (ss) Before laying any of the sealcoats the pavement shall be swept clean, flushed with water and be free of sand, dust and other foreign and objectionable material.
- (t) The entire area of bituminous concrete situated within the perimeter fence shall be seal coated. The dimensions are shown on the plans.
- (tt) Normal drying conditions shall allow for play after twenty-four (24) hours, however the Contractor shall be responsible for ensuring that the entire surface area, seal coated and striped, has fully cured before any recreational activities are allowed to take place. Suitable protection and precaution must be arranged to protect the treated areas until the final application is thoroughly dry and not subject to damage. Any damage and/or marring of the court, shall be corrected to the satisfaction of the Engineer and at the Contractors own expense.
- (u) Painters shall use soft-shoes and knee pads to prevent indentation of the fresh surface. Ragged lines will not be acceptable. The lines may be masked and brushed on or sprayed with approved power equipment.
- (v) There shall be no fogging, overspray or spattering of the court surface, including along the fence line (where the limit of the sealcoating shall be rendered crisp and straight), or upon any fence and/or net component.
- (vv) Each coat shall be thoroughly dehydrated before application of the succeeding coat.
- (w) The Contractor will be held strictly responsible for a complete watertight and blemish-free workmanlike job.
- (x) Approved line paint shall be used to paint the playing lines and no oil base paint shall be permitted.
- (xx) Manufacturer's warranties are to be assigned and delivered to the City of Newton.

Method of Measurement and Payment

- (y) Under Item 12 the basis of payment shall be one payment for the entire court surface area.
- (z) Under **Item 12** the Contractor will be paid the contract **lump sum price** for furnishing and installing the successive sealcoat(s) and striping materials, all laboratory tests, layout, line painting, and all appurtenances, which lump sum price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item and in accordance with the specific directives unique to the site as shown on the plans, as directed by the Engineer, and as specified herein.

ITEM 13 – REMOVE AND RESET EXISTING CURB

Description

- (a) Existing curb that does not meet the proposed line or grade, or other existing curb and/or curb stone system necessarily disturbed throughout the course of these operations, or existing curb used to construct handicap ramp systems, shall be reset to the existing line and grade.
- (b) Under this item the Contractor shall be responsible for moving existing curb to a new location on the site in order to best meet either the aesthetic and/or the closure needs of the project. This work shall be carried out at the direction of the Engineer.

Method of Construction

- (c) The curb to be reset shall be excavated down to the underside of the existing curb or lower if necessary. The existing curb shall then be set to true line and grade. Gravel shall be forced under the curb with appropriate tools so as to form an unyielding base.
- (d) If the Engineer so directs, the Contractor shall remove the existing curb from its existing location, prepare an adequate gravel base and reset the curb as described in **paragraph** (b) above.
- (e) Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers. Compaction shall be carried on until the density of the material is not less than ninety-five (95) percent of the Standard Proctor Density, as determined by Standard laboratory Compaction Test.
- (f) Transition and flush granite curb, either of the straight or curved type, which is installed to meet **handicap ramp/curb cut** compliances, shall be constructed according to the Architectural Barriers Board Specifications for such ramps as shown in the City of Newton General Construction Details. **This work is to be performed to exact tolerances.**

Method of Measurement

(g) Measurements taken for payment shall be taken by the **linear foot** of the reset curb, inclusive of straight and curved curb, handicap ramps, guttermouths, and/or corner blocks, complete in place.

Basis of Payment

(h) Under **Item 13** the Contractor will be paid the contract unit price **per linear foot** of reset curb, complete in place, which unit price shall include full compensation for all cement concrete, bituminous concrete asphalt labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

ITEM 14 – 4" @ 4,000 P.S.I. CEMENT CONCRETE WALKS (WITH 2 LBS. LAMPBLACK PER CUBIC YARD)

ITEM 14A- 8" @ 4,000 P.S.I. CEMENT CONCRETE ADA COMPLIANT CURB CUTS (WITH 2 LBS. LAMPBLACK PER CUBIC YARD)

Description

- (a) All cement concrete walks and curb cuts shall be built under **this item** respectively. The Contractor shall construct cement concrete walks where shown on the plans or as otherwise directed by the Engineer.
- (b) Preparatory excavation and the disposal of existing pavement material(s) shall be paid for under these items.
- (c) The base for the cement concrete walks shall consist of a six (6) inch gravel base course and a two (2) inch course of dense graded crushed stone. Dimensions shall mean the finished compacted depth. The width of the walk shall be five (5) feet unless other widths are called for on the plans or by the Engineer.
- (d) Cement concrete curb cut shall consist of a six (6) inch gravel base course and a two (2) inch course of dense graded crushed stone topped with eight (8) inches of concrete as directed by the Engineer. The width of the driveway aprons shall be five (5) feet unless other widths are called for on the plans or by the Engineer. The contractor shall adhere to the City of Newton General Construction Details.

Materials

(e) Cement concrete shall be of an air entrained type conforming to the current specifications of Section M4 of the Massachusetts Standard Specifications for Highways and Bridges supplement of June 19, 1985. Cement concrete shall have a 28 day compressive strength of 4000 PSI using 3/4 inch aggregate, and with an entrained air content of 7.0 ± 1.0%.

ADD MIXTURES: Ordinary or emulsified carbon black – two (2) pounds per cubic yard, unless otherwise directed by the Engineer.

Upon delivery of each and every concrete mix, the Engineer shall be furnished with a slip clearly stating the design mix and the quantities of the above mentioned add mixture, and any other add mixtures present in the mix. Any concrete mix, which when tested on the job site is found to contain quantities of entrained air less than six (6) or more than eight (8) per cent or which yields a slump of less than three (3) inches or greater than five (5) inches shall be rejected, the decision of the Engineer shall be final. The Engineer reserves the right to change the above mix in order to meet the required strength test.

Materials

- (f) All concrete shall be transit mix and shall conform to the current specifications of A.S.T.M. C-94. Hand mix concrete or machine mixed on the job concrete shall be used only when permitted by the City Engineer in writing.
- (h) Premoulded asphalt expansion joints shall conform to the requirements of AASHTO Designation M33.

Method of Construction

- (h) When new concrete is to be placed adjacent to existing walkways and/or driveways the Contractor shall cleanly cut a crisp joint cut by a means, and along a line, approved by the Engineer. No jackhammering of the existing walk and/or driveway shall be allowed.
- (i) The walks shall be excavated or filled to a subgrade twelve (12) inches below and parallel to the finished grade as shown on the plans or as directed by the Engineer.
- (j) Upon the prepared subbase, the gravel and dense graded crushed stone base course shall be constructed and rolled with rollers weighing not less than three (3) tons and not more than five (5) tons until the surface presents a firm unyielding surface satisfactory to the Engineer.
- (k) Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers. Compaction shall be carried on until the density of the material is not less than ninety-five (95) percent of the Standard Proctor Density, as determined by Standard laboratory Compaction Test.
- (l) All concrete walks and driveways shall be constructed with the use of side forms. The forms shall be clean, smooth and free from warp. Forms for straight concrete walks shall be two by fours (2"X 4"'s) staked at intervals no greater than four (4) feet, forms for curved sections of concrete walks shall be four (4) inch strapping staked as directed by the Engineer, but in no case at intervals greater than four (4) feet. The forms shall be thoroughly braced and set to the proposed line and grade.
- (m) Walks shall be constructed in one (1) course having a total finished depth of four (4) inches and driveway elements shall be constructed in one (1) course having a total finished depth of six (6) inches. Top or wearing courses shall not be permitted.
- (n) The end of every pour shall end at joints. Fresh concrete will not be allowed to be placed against previously laid concrete which has attained its initial set, excepting at full vertical joints.
- (o) The walks and/or driveway aprons shall be blocked out in rectangular sections measuring not more than six (6) feet in any dimension. Transverse joints for a distance of twenty (20) feet, more or less, shall be dummy joints with an approved edging tool which shall score the joints a minimum of one (1) inch in depth. The concrete walks shall be placed in alternate slabs twenty (20) feet, more or less, in length. The slabs for walks shall be separated by transverse premoulded asphalt expansion joints one-half (1/2) inch in thickness and a depth of not less than the full thickness of the walk set at right angles to the walk and to the side forms. No finishing operation shall be performed while free water is present. Finishing operations shall be delayed until all bled water and water sheen has left the surface and the concrete has started to stiffen. After water sheen has disappeared, edging operations where required shall be completed. After edging and jointing operations, the surface shall be floated with either aluminum or magnesium floats. Immediately following floating, the surface shall be steel-troweled. If necessary, tooled joints and edges shall be rerun before and after troweling to maintain uniformity. After troweling, the surface shall be brushed by drawing a soft-bristled push broom with a long handle over the surface of the concrete to produce a nonslip surface. In conveying the concrete from the place of mixing to the place of deposit, the operation shall be conducted in such a manner that no mortar will be lost, and the concrete shall be so handled that the concrete will be of uniform composition throughout, showing neither excess nor lack of mortar in any one place.
- (p) Premoulded asphalt expansion joints shall be placed adjacent to or around existing curb, walks, buildings and other structures designated by the Engineer.

- (q) No concrete shall be placed on a frozen subbase nor shall concrete be poured when the air temperature is thirty-three (33) degrees Fahrenheit and falling, unless permitted by the Engineer, in which case the adequate means for the protection of the concrete must be provided for. No salt or other unauthorized admixtures shall be used. When completed, the newly laid concrete shall be protected from all traffic and the weather for a period of three (3) days. The Concrete shall be cured by spraying with an approved curing compound of a recognized brand applied in accordance with the manufacturer's instructions.
- (r) This item shall also apply to cement concrete walks and/or driveways on private lands that have to be rebuilt to meet the proposed line and grade.
- (t) All water service boxes, and/or any other service box, and/or any handhole, which falls within the walk/drive area, is to be raised such that the top plane of the utility cover is set flush with the finished sidewalk surface, and such work shall be carried out to the satisfaction of the Engineer.
- (u) In those cases where 'frozen' water service boxes are encountered the Contractor is to bring these special cases immediately to the attention of the Engineer, and upon his order to do so, the Contractor shall either remedy the situation by a means which is acceptable to the Engineer or shall otherwise retrieve corrective materials from the City of Newton Utility, and subsequently install them to the satisfaction of the Engineer. This work shall be incidental to the project.

Method of Measurement

- (u) Cement concrete walks shall be measured for payment by **the square yard**, complete in place.
- (v) Cement Concrete curb cuts shall be measured for payment by the square yard, complete in place.

Basis of Payment

- (w) Under **this item** the Contractor will be paid the contract unit price **per square yard** for the cement concrete walks, complete-in-place. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein, inclusive of the raising of all service boxes to the finished grade.
- (x) (w) Under **this item** the Contractor will be paid the contract unit price **per square yard** for the cement concrete curb cuts, complete-in-place. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein, inclusive of the raising of all service boxes to the finished grade.

SECTION 16

ITEM 15 – DISTRIBUTE, GRADE/REGRADE & SEED ALL LOAM MATERIAL(S) (REQUIRING TWO 'AFTER-SEED' HAND-RAKINGS)

ITEM 16 – SUPPLEMENTAL LOAM (IF ORDERED BY THE ENGINEER)

Description

- (a) Under respective **Item 15** and **Item 16** the salvaged and/or stockpiled loam, or otherwise if ordered by the Engineer, the newly delivered supplemental loam (supplied from an outside), shall be used to rebuild the lawn areas adjacent to the street, walkways, pathways and/or swales to meet the proposed lines and grades for the purpose of smoothly transitioning the new work into the existing topographical conditions as shown on the plans and/or as directed by the Engineer. **The depth of loam used in the this effort shall be six (6) inches in depth as measured in its finished state** and shall conform to the dimensions shown on the construction details and as specified herein. **The Engineer reserves the right to pro-rate any loam areas that are 'feathered into' the existing conditions, and/or are used to 'top-dress' any existing areas, and which are not fully six inches (6") in depth.**
- (b) In the event the Engineer deems it necessary to supplement the 'salvaged' loam, to achieve a smooth transitioning between the proposed and existing conditions, and only upon the orders of the Engineer to do so, the Contractor, shall supply loam under **Item 15**, however the distribution and grading of loam supplied under **Item 16** shall be paid for under **Item 15**.

Materials

(c) Loam, Limestone, Fertilizer, and Grass Seed shall conform to **paragraphs** (d)-(j) of these specifications noting that the Grass Seed for slopes less than 3:1 shall be of the finer type to produce a finer turf. Whereas the Grass Seed for slopes greater than 3:1 shall comply with the directives of **paragraph** (j).

- (d) Loam shall be clear, rich, dark colored loam friable, reasonably well supplied with plant food, free from excess swamp muck, peat, clay, silt, stones, sods, roots, gravel, sand, subsoil or other foreign material. All loam furnished and/or used for this work shall be approved by the Engineer.
- (e) Limestone shall be ground limestone that will pass a No. 20 sieve, and at least seventy-five (75) per cent will pass a No. 100 Sieve. Ground limestone shall have a neutralizing value satisfactory to the Engineer.

Materials (Continued)

(f) Fertilizer shall be furnished in containers plainly marked with the chemical analysis of the product and it shall have one of the following compositions by weight.

	10-6-4	8-6-4	7-7-7
Nitrogen	10% min.	8% min.	7% min.
Available Potash Acid (P ₂ 0 ₅)	6% min.	6% min.	7% min.
Water Soluble Potash (K ₂ 0)	4% min.	4% min.	7% min.

At least fifty (50) per cent by weight of the nitrogen content of the fertilizer shall be derived from organic materials.

(g) Grass seed shall be of the previous year's crop and in no case shall the weed seed content exceed one (1) per cent by weight. Grass seed shall conform to the requirements of the following table:

		Germination	Purity
	Proportion	Minimum	Minimum
Creeping Red Fescue	50%	85%	95%
Kentucky Blue	25%	85%	90%
Domestic Rye	10%	90%	98%
Red Top	10%	85%	92%
Ladino Clover	5%	85%	96%

- (h) The several varieties of seed shall be furnished and delivered separately, and mixed after delivery as directed by the Engineer.
- (i) The responsibility for satisfactory results shall rest entirely with the Contractor regardless of any tentative approval given by the Engineer.
- (j) The seed mixture specified for slopes graded at the rate of 3:1 and greater shall consist of a tough hardy type. Grass seed for slopes graded at the rate of 3:1 and steeper shall conform to the requirements of the following table.

	Germination	Purity
Proportion	Minimum	Minimum
50%	85%	95%
25%	85%	90%
10%	90%	98%
10%	85%	92%
5%	85%	96%
	50% 25% 10% 10%	Proportion Minimum 50% 85% 25% 85% 10% 90% 10% 85%

Method of Construction

- (k) Areas being prepared for the loam shall be excavated to subgrade six (6) inches below and parallel to the finished grade. Feathering at the edges of the project limits shall only be allowed at the Engineer's discretion, however any such areas are subject to averaging and pro-rating the amount of square vards for payment purposes.
- (l) Loam shall then be spread on the subgrade in sufficient quantities to produce without rolling and after material settlement has taken place, a depth of four (4) inches. On this layer of loam ground limestone shall be spread at the rate of one-half (1/2) pound per square yard and thoroughly incorporated into the loam for the total depth, by harrowing or spading and raking. The surface shall be brought smoothly to a grade parallel to the finished grade.
- (m) The second layer of loam shall then be spread in sufficient quantities to produce after final rolling the required finished depth. At least five (5) days shall elapse after the application of the ground limestone, and then fertilizer shall be spread on the top layer of loam at the rate of two tenths (2/10) of a pound per square yard. The full depth of the loam shall then be spaded, harrowed and graded to the finished grade.
- (n) After the grass plots have been prepared as described above, grass seed shall be carefully and appropriately sown at the rate of three and six tenths (3 6/10) pounds to each one hundred (100) square yards. The surface shall then be raked until the grass seed is thoroughly covered with a thin layer of well graded loam **which action shall constitute the first hand raking**. Finally the surface shall be rolled with a hand roller weighing not more than one hundred (100) pounds per foot of width.
- (o) After a substantial rainfall the Contractor shall again hand rake the regraded area for the purpose of removing all small stone particles and any other debris which has been exposed by the washing down of the loam. This action shall constitute the second hand raking, however it does not diminish the Contractors responsibility for ensuring a catch of grass throughout all areas, nor his responsibility for providing a pebble free regraded area.
- (p) The Contractor shall insure a good catch of grass and shall be responsible for the first cutting of the grass. He shall maintain seeded areas during construction and he shall reloam, regrade and reseed any area which in the opinion of the Engineer requires such.

Method of Measurement

- (q) Under Item 15 measurements taken for payment shall be by the square yard of the finished work, complete in place. In accordance with paragraph (a) the Engineer reserves the right to pro-rate any loam areas that are 'feathered into' the existing conditions and which are not fully six inches (6") in depth.
- (r) Under **Item 16** measurements taken for payment shall be by the **cubic yard** of loam approved by the Engineer, furnished by the Contractor, and which quantities are ultimately verified by the Engineer prior to placement, however the **distribution**, **grading and seeding of loam supplied under Item 15** shall be paid **for under Item 15**.

Basis of Payment

- (s) Under **Item 15** the Contractor will be paid the contract unit price **per square yard** for distributing any existing 'on-site salvaged' loam material and/or for loam furnished by the Contractor under **Item 16**. This work shall include the collective distribution, mixing, grading, and seeding of these combined and/or separate components, inclusive of the two hand rakings required, for the purpose of establishing all lawn areas complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.
- (t) Under **Item 16** the Contractor will be paid the contract unit price **per cubic yard for loam furnished** by the Contractor from an off-site(s) source when ordered by the Engineer to do so, which unit price shall include, upon delivery, acceptance of quality, and quantitatively verified by the Engineer in the field, shall be full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein.
- (u) The distribution, grading and seeding of loam supplied under Item 16 shall be paid for under Item 15.

ITEM 17 – TEMPORARY GRAVEL DRIVEWAY

Description

- (a) As shown on the plans, the Contractor shall be responsible for constructing, using, and removing a temporary access driveway, constructed to the satisfactory of the Engineer.
- (b) Excavation shall be done and paid for under this item.
- (c) The temporary driveway shall consist of a six (6) inch compacted 1-1/2" double washed stone over filter fabric, as shown on the plans. Dimensions shall mean the finished compacted depth.

Materials

(d) **Section 4** of these specifications shall apply.

Method of Construction

- (e) The temporary gravel driveway shall be excavated or filled to subgrade six (6) inches below and parallel to the finished grade as shown on the plans.
- (f) The constructed base shall then be topped with stone screenings and compacted and watered as described in **paragraph** (e) of this section.

Method of Measurement

(h) Gravel driveways shall be measured for payment by the **square yard**, complete in place.

Basis of Payment

(i) Under **Item 17** the Contractor will be paid the contract unit price per **square yard** for constructing gravel driveways, complete in place, **including preparatory excavation and the disposal of excess material(s), and for the furnishing of gravel**. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

SECTION 18

ITEM 18 – ALLOWANCE FOR MISCELLANEOUS WORK (ENGINEERS DISCRETIONARY FUND)

Description

The work of this section is to complete certain items of work which are not called for under the specifications or indicated on the plans but which are requested by the Engineer. These items of work shall be completed only when and as directed by the Engineer. The Contractor may not proceed with any work under this section without the written notice of the Engineer to complete the work under the "Miscellaneous Work Allowance".

The sum to be allowed for the work of this item shall be **forty thousand dollars** (\$40,000.00).

All work under this item shall be paid for by one or more or a combination of the following methods at the City's discretion.

- a. Unit prices previously bid.
- b. An agreed lump sum.
- c. The actual cost of:
 - 1. Labor, including foremen;
 - 2. materials entering permanently into the work;
 - 3. the ownership or rental cost of construction plant and equipment during the time of use on the extra work;
 - 4. power and consumable supplies for the operation of power equipment;
 - 5. insurance;
 - 6. social security and old age and unemployment benefits.

To the cost under c. there shall be added a fixed fee to be agreed upon but not to exceed fifteen per cent (15%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expense.

The City shall retain a cash credit in full or in part, in the event that the final cost of materials and/or equipment is lower than the original cash allowance provided.

To the estimated cost or actual cost under (c) for work performed by subcontractors, there shall be added a fixed fee of ten per cent (10%) as compensation to cover the subcontractor's cost of supervision, overhead, profit and any other subcontract general expense, plus ten per cent (10%) as compensation to cover the General Contractor's cost of supervision, overhead, profit, bond and any other general expenses.

Basis of Payment

Payment for work completed under **Item 18** shall be as specified above, in full or in part, as approved by the Engineer.

ITEM 19- FURNISH & MOUNT SAFETY & SPECIALTY SIGNBOARD (INCLUDING THE POST SYSTEM)

Description

Seven days prior to the commencement of work the Contractor shall establish safety and specialty signboards with posts, as directed by the Engineer, and/or as described on page 66 of the City of Newton "General Constructions Details Revised Through March 2003" and/or as shown on the plans and/or as otherwise may be required. However, the Contractor is not to order any signboards until he has coordinated this effort with the Engineer in order to identify the maximum number, and various types of signboards that should be contained in the initial sign making order as every new signboard, once delivered, is to be reused. The Contractor is to order new signboards as the Engineer may further direct as the construction activities progress, however, no payment will be made for any new signboards which are damaged or lost. Damaged or lost signs are to be replaced at the Contractors own expense.

Signboards and posts are to be the first mobilization element to be established throughout the project zone before any other construction activities take place.

Specialty signboards, bearing unique messages, shall be fabricated by special order of the Engineer to address any and all site specific informational requirements.

Once established, all signboards and/or post systems are to be maintained for the duration of the construction activities. Any damaged signboards and/or post systems are to be immediately replaced at the Contractors own expense without any additional compensation.

Materials

Plywood signboards panels shall be fabricated from ¾" thick Medium Density Overlaid (MDO) Exterior Type, A-B both sides in natural color and the whole conforming with the requirements and tests for the above as set forth in U.S. Products Standards PSI-74 for Construction and Industrial Plywood. All plywood shall bear the grade trademark of an approved testing agency. The entire area of the signs shall be reflectorized with the reflective sheeting conforming to Section M9.30.0 of the Commonwealth of Massachusetts, Standard Specification for Highway and Bridges, latest edition. All applicable portions of Sections 828 and 840 of the aforementioned specifications shall also apply.

Posts shall be constructed of sturdy material(s) and adequately installed so as to withstand seventy-five mile an hour sustained winds when the respective sign is mounted in place. No payment will be made for posts, and/or support systems, which do not clearly meet this criteria. No additional payment will be made to replace any damaged post systems.

Method of Construction

All signboards shall be fastened in the manner described in the Construction Details, and/or as shown on the plans, or as directed by the Engineer.

SECTION 1

The Contractor shall be responsible for maintaining all signboards and posts for the duration of the contract and all signs and/or posts damaged or lost during construction shall be replaced by the Contractor at his own expense. Upon completion of the Contract, all safety and specialty signboards shall become the property of the City of Newton. Signboards shall be delivered by the Contractor to a City location designated by the Engineer, where the Contractor is to neatly stockpile the signboards (exclusive of the posts).

The City reserves the right to limit the number of signs it receives, and to further pick and choose which signs are to be delivered to the City of Newton. In the event the City has no desire to take control of the signs, then the Contractor is to dispose of them as he so chooses, however, in no case is any sign to be discarded in this manner until such time as the Engineer authorizes its release.

Method of Measurement

Under Item this item, measurement for the payment of signboards with posts shall be by the square foot of surface area for each new and professionally made signboard. No additional payment will be made for field made signboards which are ordered by the Engineer and which bear a temporary hand-written message.

Basis of Payment

Under Item this item the Contractor will be paid the contract unit price per square foot for each new professionally made safety and specialty signboard authorized and/or approved by the Engineer, complete in place, inclusive of the post system(s).

Under this item signboards are to be furnished, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

No additional payment will be made for signs and/or signposts which, subsequently replace previously established units.

ITEM 20 – SAFETY CONTROLS FOR CONSTRUCTION OPERATIONS

Description

- (a) Work under this section consists of providing, positioning, repositioning and maintaining various traffic and/or pedestrian control devices, inclusive of drum devices, emblazoned caution ribbon, cones, or any other necessary means for guiding and preserving the safety of the traveling public, and the safety of the working personnel during construction and maintenance operations, which actions and materials includes channelizing, barricades, detouring and other warning devices, as directed by the Engineer, and/or as requested by the Police Detail Officer, and/or as shown on the plans.
- (b) Under this item the Contractor is solely responsible for all safety aspects of the Contract subject to the Provisions of the General Conditions of the Contract.

Materials

(c) Drums shall be Type IV reflectorized in their entire white and orange areas with reflective sheeting. Barricades along with non-metallic reflectorized drums shall conform to Section M9 of the Mass. DPW

Standard Specifications for Highways and Bridges. Newly developed products providing equivalent target value and stability that are acceptable to the Engineer may be used. All barricades and drums shall be maintained in a satisfactory manner, including the removal of dirt or road film that causes a reduction in sign reflective efficiency.

- (d) Each barricade and drum used for warning or channelizing at night shall be equipped with a flashing light. All devices that are not lighted at dusk shall be repaired or replaced.
- (e) Materials required under this section need not be new, but must be in first class condition and acceptable to the Engineer. Any materials, that in the judgement of the Engineer, are unsatisfactory in appearance and/or performance, shall be removed and immediately replaced by acceptable units. However, the Contractor is solely responsible to monitor and verify the conditions of the materials, and to take immediate action to remedy any deficiencies otherwise brought to his attention.
- (f) Signs for drum devices are to comply with all applicable provisions of the appropriate item.

Method of Construction

- (g) All warning and directional devices shall be subject to removal, replacement and/or repositioning as often as is necessary. Deployment of such devices shall be the sole responsibility of the Contractor, therefore ample number of devices must be maintained at all times and at no time is vehicular or pedestrian traffic be a cause for concern.
- (h) The Contractor is to work closely with the Safety Officer of their insurance agent to determine, and establish, on an ongoing systematic basis, as the construction operations progress, the number of reflectorized devices that are needed in order to eliminate any and all potential safety hazards to the general public.
- (i) Cones of non-reflectorized warning devices shall not be left in operating position when the day's operations have ceased.
- (j) Further, all signs mounted on drum devices are to be turned away from traffic at days end when no longer in use.

Method of Measurement

(k) The Contractor shall be paid per drum day, for each drum on site for the duration of the project. All drums will be deployed as requested by the engineer.

Basis of Payment

- (l) The contractor shall be paid per drum day for this item, and it shall constitute full payment for all materials, labor and equipment required or incidental to the work described above and/or as shown on the plans. Any devices which are lost, stolen, destroyed, or deemed unacceptable while their use is required on the project shall be replaced without additional compensation.
- (m) Signboards for placement upon drum devices will be paid under Item 19.

ITEM 21 – ALLOWANCE FOR MATERIALS TESTING

Description

- (a) The Contractor shall include in his bid an allowance of **five hundred dollars** (\$500.00) for cylinders and for other tests conducted in the field and/or the laboratory as required by the Engineer for the control of the concrete, reclaimed pavement material, bituminous concrete pavement, or for any other material.
- (b) The City will reimburse the Contractor the full amount of the material testing services provided when approved by the Engineer. The Contractor is required to submit to the City Engineer copies of evidence of payment.
- (c) Under this item the Contractor shall, at the direction of the Engineer, either transport the sample materials to the testing facility site or shall otherwise arrange to have the samples retrieved directly from the field location. In addition, the Contractor shall coordinate the sampling, transport and the manner in which the results of the sampling are submitted with the Engineer.

Basis of Payment

(d) Under Item 21 the Contractor will be paid the full invoice amount for approved and/or authorized material testing services conducted by an independent and qualified laboratory. Under no circumstances will the City of Newton pay for any testing procedures which unreasonably exceed accepted industry standards.

ITEM 22 – ALLOWANCE FOR PAYMENT OF POLICE OFFICERS

Description

- (a) The Contractor shall include in his bid an allowance of **two thousand dollars** (\$2,000.00) for payment of Police traffic officers. This allowance will be used as a basis for comparison of bids only.
- (b) The City will reimburse the Contractor for the full amount of charges for Police services.
- (c) Article 1 of the Special Conditions of the Contract shall apply.
- (d) Under this item the Contractor shall be responsible for ordering, and for canceling details on a day to day basis. In the event the Contractor has ordered police details, and does not give the police department ample advance notice that work has been cancelled for that day due to inclement weather or for any other reason, then the Contractor shall bear the expense of that billed detail.
- (e) The Contractor shall completely familiarize himself with the current policies regarding and/or regulating police details. In the event police detail requests cannot be completely filled to cover the Contractor's scheduled work for any particular day then the Contractor shall adjust his work schedule accordingly and shall not hold the City responsible for any loss of time, or for any other financial loss. The City of Newton will however grant an extension of time to the original contract term for each day lost due to insufficient police staffing.

Basis of Payment

(e) Under Item 15 the Contractor shall submit paid invoices to the Engineer. The Contractor shall then be reimbursed the full invoice amount for City of Newton Police Department charges and/or, when applicable, for Massachusetts State Police charges, as full reimbursement under the allowance for payment of Police officers.

(f) The original invoice issued by the billing authority must be submitted to the Engineer for payment under this item.

ITEM 23 – MANUFACTURED 'SILT SACK' FOR CATCHBASIN (SEDIMENTATION CONTROL)

Description

(a) Under this item the Contractor shall furnish and install factory manufactured silt sacks in all catchbasins in accordance with the detail as shown on the plans and/or as directed by the Engineer. The silt sacks shall be strategically installed along the roadway and/or target areas as directed such that any soil contaminated run-off generated by the Contractor's operations is captured in the silt sack. To that end the silt sacks shall be continuously moved forward of the work as the work progresses and shall not be removed from any catchbasin until such time as all potential run-off for the immediate work zone is deemed to be reasonably free of silt contamination by the Conservation Commission and/or the Engineer.

Material

- (b) The silt sack shall be a factory manufactured unit that is specifically designed as a sedimentation containment device and it shall be provided with integrally equipped fabric lugs through which shall pass #8 (eight) steel reinforcing bar such that, upon the removal of the catchbasin grate, the silt sack shall neither fall into the catchbasin structure nor shall it allow its contents to prematurely empty into the catchbasin unit.
- (c) The steel rebars shall be cut and fitted to the silt sack in such a way that they pose no projection hazards. In addition, the steel bars shall be reasonably free of any sharp edges.
- (d) In the event the silt sack is installed where there is a curb opening then the Contractor shall also equip the silt sack unit with a foam filler to prevent any sedimentation from bypassing the silt sack.

Method of Construction

- (e) The placement of new silt sacks shall be at the discretion of the Engineer.
- (f) The Contractor shall not commence with any trenching operations until such time as silt sacks have been installed in every catchbasin that lies downstream from his work zone and has the potential of intercepting the run-off from the work zone.
- (g) Once the silt sacks have been fitted to the catchbasin the Contractor shall replace the catchbasin grate in such a way that it lies flush with the top of the catchbasin frame. Whenever this cannot be achieved, or whenever a potential tripping hazard exists then the Contractor shall place a safety device at that location.
- (h) The Contractor shall be diligent in keeping the silt sack clean and he shall remove all excessive silt either by his own volition or as he is otherwise directed to do so by the Engineer.

Method of Measurement

- (i) The Contractor shall continue to move the silt sacks forward of the work as the Engineer either directs and/or allows or the Contractor shall otherwise install supplemental silt sacks as the case(s) may necessitate.
- (j) When the silt sacks are emptied it shall be done in a responsible fashion so that the captured silt is immediately discarded from off of the site.
- (k) Double catchbasins shall be provided with two silt sacks.
- (1) Measurements taken for payment of shall be <u>for each new silt sack</u> that is initially provided by the Contractor. <u>To that end the Contractor will be required to subsequently remove, empty and move the silt sack to a new location without further compensation.</u>

Basis of Payment

(m) Under Item 23 the Contractor will be paid the contract unit price <u>for each new silt sack</u> that is initially provided by the Contractor under the direction of the Engineer. <u>To that end the Contractor will be required to subsequently remove, empty and then move the used silt sack to a new location without <u>further compensation</u>, which unit price shall include full compensation for all labor, materials, tools, equipment and all incidental work necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.</u>

ITEM 24- PROPOSED EROSION CONTROL DEVICE (SILT FENCE) ITEM 25- TREE PROTECTION

Description

Under this item the Contractor shall install proposed erosion control device (silt fence) for the protection of the surrounding wetlands and snow fence for the protection of existing trees as shown on the contract drawings and as directed by the Owner in the field.

Material

Silt Fence shall be Mirafi 100x non-woven filter fabric or approved equal.

Snow Fence shall be Tenax Safety Snow Fence or approved equal.

All wooden posts, spaced 10' on center, shall be 2" square posts, approximately 4' tall.

Method of Measurement

The Contractor shall be paid per linear foot of silt fence installed, inclusive of wooden stakes.

The Contractor shall be paid per linear foot of snow fence installed, inclusive of wooden stakes.

Basis of Payment

Under **Item 24** the Contractor will be paid the contract unit price **for each linear foot of erosion control device installed** under the direction of the Engineer which unit price shall include full compensation for all labor, wooden stakes, materials, tools, equipment and all incidental work necessary to complete the work under this item, as shown on the plans, as directed by the manufacturer and as directed by the Engineer and as specified herein.

Under **Item 25** the Contractor will be paid the contract unit price **for each linear foot of snow fence installed** under the direction of the Engineer which unit price shall include full compensation for all labor, wooden stakes, materials, tools, equipment and all incidental work necessary to complete the work under this item, as shown on the plans, as directed by the manufacturer and as directed by the Engineer and as specified herein.

ITEM 26 -DETECTABLE TILE SURFACE FOR CURB CUT LOCATIONS

Description

(a) The work under this item shall consist of furnishing and installing, by embedding in wet cement concrete, a factory manufactured Composite Detectable Tile Warning Surface that is ADA guideline compliant for the purpose of indicating the presence of a handicap ramp and/or curb cut location. These surfaces shall be accessed by the general public and the physically challenged alike, therefore the installation of these surfaces will require that the Contractor exercise exceptional care in the placement and the finishing process' associated with these tiles.

Materials

- (b) The Surface shall be equal * to PART NO. 2460IDPAV2 :
- * A federal yellow twenty four inch by sixty inch (24"x 60") Cast-In-Place Truncated Dome (Composite Tactile) Detectable Warning System as manufactured by;

ADA Solutions, Inc. P.O. Box 3 North Billerica MA 01862 1-800-372-0519 www.adatile.com

*An approved equal shall mean a factory-fabricated system which either meets or exceeds the physical characteristics of the representative surface which is noted above. To that end the contractor must seek approval for an alternate surface by submitting, to the City of Newton, a catalog cut of the system which he proposes to use. This submittal, and/or actual samples of the material, shall clearly describe the physical characteristics of the proposed alternative unit such that the City of Newton can readily evaluate the proposed system.

"Equality" - An item equal to that named or described in the specifications of the contract may be furnished by the Vendor and the naming of any commercial name, trademark or other identification shall not be construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, at time of bid, use or fabrication of such items. Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions,

specifications and recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Vendor.

(c) The Detectable Warning Surface shall be of the "CAST IN PLACE REPLACEABLE TACTILE WARNING SURFACE TILES" type or approved equal.

Method of Construction

- (e) Manufacturer's warranties are to be assigned and delivered to the City of Newton.
- (f) The Contractor shall install each Detectable Tile to meet the exact gradient tolerances prescribed in the current ADA guidelines which are shown in the City of Newton General Construction Details. Typically this gradient, from top to bottom, shall not exceed 7.5 % (or two inches (2") over the twenty-four (24") inch depth of the Tile). Nor shall the gradient, from side to side, exceed 1.5% (or one inch (1") over the sixty inch (60") width of the tile).
- (g) In addition to complying with the latest ADA requirements the Contractor shall install each Detectable Tile in accordance with the directives shown on the plan.
- (h) Typically each Detectable Tile shall be installed so that the front (street side) edge is set back twelve (12") inches from the face of the curb (so that six (6") inches of cement concrete remain between the back of the curb and the edge of the tile).
- (i) Cracked, chipped or deficiently domed tiles will not be accepted.
- (j) The Contractor must plan his work so that the outlying cement concrete panels transition to the edge of the tile in a smooth and uniform manner.
- (k) Any cement concrete placed adjacent to the tiles shall be brought flush with the surface edge of the tile and shall be finished with an edge trowel.

Method of Measurement

(1) Under this item the Contractor shall be paid per each of Detectable Tiles complete-in-place.

Basis of Payment

(m) Under this item the Contractor will be paid the contract unit price per each of Detectable Tiles, complete-in-place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as required by the Engineer and as specified herein.

END OF BASE BID

ITEM ALTERNATE 1 - BITUMINOUS CONCRETE SIDEWALK

Description

- (g) Bituminous concrete walks shall be constructed in where directed by the Engineer.
- (b) Excavation shall be done and paid for under **this item**.
- (c) Bituminous concrete walks shall consist of a six (6) inch gravel base and a two (2) inch course of dense graded crushed stone, topped with a three (3) inch bituminous concrete Type I-1 wearing surface. All dimensions shall mean the finished compacted depths. The width of the walk shall be five (5) feet unless other widths are called for on the plans or by the Engineer.

Materials

- (d) Gravel and dense graded crushed stone shall conform to M1.03.0 and M2.01.7of the MassDOT Standard Specifications, latest edition, respectively.
- (e) This type of pavement shall be composed of mineral aggregate, mineral filler and bituminous material, plant mixed and laid hot. The mixing and materials shall conform to the current specifications as set forth in the MassDOT Standard Specifications, latest edition, Sections 460 and M3, dated 1988 for Bituminous concrete Type I-1.

Method of Construction

- (f) The walks and/or drive aprons shall be excavated or filled to subgrade ten (10) inches below and parallel to the finished grade. At driveways the walks shall be excavated or filled to subgrade twelve (12) inches below and parallel to the finished grade. The gravel base course and the dense graded crushed stone course shall then be constructed and rolled with roller weighing not less than three (3) tons and not more than five (5) tons until the surface presents a firm unyielding surface satisfactory to the Engineer.
- f) Any area that is inaccessible to mobile mechanical equipment or in restricted areas shall be compacted with pneumatic rammers or powered hand tampers.
- (g) Compaction shall be carried on until the density of the material is not less than ninety-five (95) per cent of the Standard Proctor Density as determined by Standard Laboratory Compaction Test. The Contractor shall arrange and pay for and submit to the Engineer results of such tests taken in such number as to indicate a test of every eight hundred (800) square feet of compacted area.
- (h) All bituminous concrete walks and/or drive aprons shall be constructed with the use of side forms. The forms shall be clean, smooth, free from warp, of sufficient strength to resist springing out of shape and of a depth to conform to the thickness of the bituminous concrete wearing surface. The forms shall be well staked and thoroughly braced and set to the proposed line and grade.
- (i) The bituminous concrete shall consist of a three (3) inch finished depth of Type I-1 bituminous concrete laid in two (2) courses, a base or binder course of one and three-quarter (1 3/4) inch and a top or wearing course of one and one quarter (1 1/4) inch. All dimensions shall mean the finished depths. The mixture shall be placed from approved dump sheets or wheelbarrows fed directed from trucks. Dumping the mixture directly from trucks on the base will not be allowed.

- (f) The bituminous concrete must be kept clean during hauling and handling and covered during transit with canvas or other material which will retain the desired pavement temperature. These mixtures must not be hauled in such a manner that segregation of the ingredients takes place, or that a crust is formed on the surface, or that the mixture will crumble or flatten out when dumped. Trucks which transport the mixture shall be tight, and the side of the bodies shall be coated with a thin film of soap solution. The dispatching of trucks from the distribution point shall be so arranged that all the material which is to be delivered at or on the road surface during any day may be placed and shall have received final compression in a continuous manner in order to minimize cold seaming.
- (g) The bituminous concrete mixture shall be delivered to the work in such condition that it is easily workable and can be efficiently laid. The mixture shall be laid only on an approved base course which is dry and only when weather conditions are suitable which shall be decided by the Engineer.
- (h) All bituminous concrete applied to the roadway shall only be applied in bright sunlight or partly cloudy weather without the threat of rain. The Contractor is not to schedule bituminous roadway application unless such favorable weather conditions are professionally forecast by a recognized weather agency, and at the request of the Engineer, this forecast shall be filed with Engineer in hard-copy form. Further, no bituminous concrete shall be applied upon a residually wet surface, and no bituminous concrete which has been prematurely cooled by rain, either on the roadway or on the truck, will be accepted.
- (k) The separate courses shall be rolled with a self-propelled equally balanced tandem roller weighing not less than three (3) tons and not more than five (5) tons. In places inaccessible to a power roller, compaction shall be obtained by means of hand tampers.
- (l) The roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the mixture is to be discontinued at the end of the day's operation. In such cases, provisions shall be made for proper bonding with new surface mixture by cutting back over the full width and depth of the course. When laying of the course is resumed, the exposed edge of the joint shall be painted with a thin uniform coat of hot asphalt, just before the new mixture is laid.
- (m) The finished surface shall present an even and true contour. When tested with a ten (10) foot straight edge place parallel to the center line of the surface course there shall be no deviation from a true surface in excess of one quarter (1/4) of one (1) inch. The sides when the forms are removed shall present a true line conforming to the line desired.
- (n) Landings and roundings at the street corners shall be constructed as specified in the construction details and/or as directed by the Engineer.

Method of Measurement

(o) Bituminous concrete walks shall be measured for payment by the square yard, complete in place.

Basis of Payment

(p) Under **this ITEM** the Contractor will be paid the contract unit price per square yard for the bituminous concrete walks and/or drive aprons, complete in place, **including excavation**, **the gravel and dense graded crushed stone**. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidental work necessary to complete the work under this item as shown on the plans, as directed by the Engineer and as specified herein.

ITEM ALTERNATE 2 – WATER FOUNTAIN

PART 1 – GENERAL

Summary of Work

Under this item the contractor is to furnish and install a water fountain as shown on the plans and specified herein. This shall include safely removing and disposing of the existing water fountain and connecting to the existing water system. It is the responsibility of the contractor to familiarize themselves with the site prior to bidding on this item.

The Contractor shall submit the following:

Product Data: Submit manufacturer's technical product data and installation instructions for drinking fountain and miscellaneous pipe connections as required by the installation. All pipe furnished under the contract shall be manufactured in accordance with these Specifications.

The following standards are applicable to the work of this Section to the extent referenced herein:

- 1. ASTM: American Society for Testing and Materials.
- 2. ANSI: American National Standards Institute.
- 3. AASHTO: American Association of State Highway and Transportation Officials.

The contractor shall protect pipe, pipe fittings, and seals from dirt and damage.

The contractor shall comply with State Environmental Code and shall not interrupt existing utilities serving the existing building.

CODES, TESTS AND INSPECTIONS

- A. The water line connection shall comply with all local and state laws and ordinances and with all the established codes applicable thereto. Follow requirements of this specification when in excess of the aforementioned regulations.
- 1. Install plumbing components in compliance with plumbing codes.

1.10 SEQUENCING AND SCHEDULING

A. Contractor is responsible for coordinating the installation of the drinking fountain with the permanent structures on site.

TESTING

- A. Furnish all labor, material, instruments, supplies and services, and bear all costs for the accomplishment of the tests herein specified. Correct all defects appearing under test, and repeat tests until no defects are disclosed. Leave equipment clean and ready for use.
- B. Test all piping systems with constant water pressure of 150 psi until all joints are inspected. Pipe joints shall hold tight at the pressure head stated. All waterlines and valves shall be tested and approved before backfilling. Test drainage system for leaching basin after piping has been installed.

C. Test and/or check lines before and after backfilling to assure free flow. Remove obstructions, replace damaged components and retest system until satisfactory.

PIPES AND FITTINGS

- A. Water Line shall be PVC or PEX piping, solid.
- B. Drain (Waste) Lines shall be Schedule 40 PVC, solid.

DRINKING FOUNTAIN

- A. Drinking Fountain shall be Model #440SM by Most Dependable Fountain, Inc., Arlington, TN, tel: 1-800-552-6331, email: www.mostdependable.com, or approved equal.
- 1. Fountain shall be a freeze-resistant, barrier-free, pedestal drinking fountain with polished stainless steel bowl and powder-coated galvanized steel pedestal. Color shall be selected by Owner's Representative.
- 2. Fountain design meets ADA 'hi-lo' requirements for use.
- 3. Deliver fountain with 10" stainless steel surface carrier and surface mount template. Fountain shall be made of one piece weld construction with standard 3/16" wall thickness.
- 5. Receptor Bowl shall be made of 18 gauge electro-polished stainless steel.
- 6. Fountain comes with 1 year warranty.
- 7. Fountain shall be delivered with zinc plated rods for attachment into concrete pad.
- 8. Fountain shall have a hose bib.

MISCELLANEOUS MATERIALS

EPOXY GROUT shall conform to ASTM C-881 and equal to "Sikadur 32, Hi-Mod" high strength adhesive as manufactured by Sika Corporation, Lyndhurst NJ, or approved equal.

PART 3 – EXECUTION

INSTALLATION, GENERAL

- A. Drawings indicate the general location and arrangement of the new drinking fountain. Install piping as required to connect water line in new fountain to existing water line on the site and to connect waste line to existing waste line.
- B. Use proper size increasers, reducers, and couplings, where different sizes or materials of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.

PIPE JOINT CONSTRUCTION AND INSTALLATION

A. General Locations and Arrangements: Contract Drawings indicate the general location and arrangement of the drain pipe. Install the drain pipe as indicated, to the extent practical.

- B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Maintain swab or drag in line and pull past each joint as it is completed. All piping shall be laid in the dry.
- C. Install piping pitched down in direction of flow as indicated on the Contract Drawings and in accordance with governing authorities having jurisdiction, except where more stringent requirements are indicated.
- D. Acceptance of Pipe: Acceptance will be on the basis of tests specified herein before. The quality of all materials used in the pipe, the process of manufacture, and the finished pipe shall be subject to review by the Engineer. Inspection may be made at the place of manufacture, or on the work site after delivery or at both places and the pipe shall be subject to rejection at any time on account of failure to meet any of the specification requirements, even though sample pipe units may have been accepted as satisfactory at the place of manufacture. All pipe which is rejected shall be immediately removed from the project site by the Contractor.

BACKFILLING

A. General: Initial backfill shall be placed evenly on both sides of the pipe connections to distribute the load and not to cause movement or deflection of the pipe.

DRINKING FOUNTAIN INSTALLATION

- A. Install drinking fountain in location and orientation as shown on Drawings. Fountain shall be installed plumb in all directions.
- B. Securely fasten drinking fountain to concrete slab with surface carrier, stainless steel fasteners and surface mount template as provided by manufacturer.
- C. Install epoxy and sealants in strict accordance with manufacturer's written instructions.
- D. Repair damaged surfaces and finishes after completion of installation, or replace damaged members as directed where damage is beyond satisfactory repair.
- E. Fountain waste line shall be directed into a new PVC drain line which is sloped towards the new leaching basin. Drain Line shall be inserted into Leaching Basin as shown on Drawings.

FIELD QUALITY CONTROL

- A. Clear interior of piping and structures of dirt and superfluous material as the work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.
- 1. Place plug in end of incomplete piping at end of day and whenever work stops.
- 2. Flush piping to remove collected debris.
- B. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of the Project.
- 1. Defects requiring correction include the following:
- a. Alignment: Less than full diameter of inside of pipe is visual between structures.

- b. Crushed, broken, cracked, or otherwise damaged piping.
- c. Infiltration: Water leakage into piping.
- d. Exfiltration: Water leakage from or around piping.
- 2. Replace defective piping using new materials and repeat inspections until defects are within allowances specified.
- 3. Reinspect and repeat procedure until results are satisfactory.

METHOD OF MEASUREMENT

The new Drinking Fountain will be measured at the Contract Unit Price per EACH, complete in place.

BASIS OF PAYMENT

All payments shall include full compensation for all labor, tools, equipment, and all incidental work necessary to complete the work under these items as shown on the Drawings, as directed by the Owner's Representative, and as specified. Installation shall include any excavation, water and waste connections, concrete pad and installation of drinking fountain.

New Drinking Fountain. The Contractor will be paid for at the contract unit price per EACH, complete in place, which price shall also include any excavation, water and waste connections and installation of fountain.

ITEM - ALTERNATE 3 – FURNISH AND INSTALL A PARK BENCH (INCLUDING THE REMOVAL & DISPOSAL OF AN EXISTING PARK BENCH)

Description

(a) The work under this item shall consist the excavation, removal and disposal of an existing park bench and for furnishing and installing, by embedment, a factory manufactured Park Bench.

Materials

(b) The proposed Park Bench shall be equal * to Model 11-80PL with an S-1 type embedment and having a bronze finish with GREY colored plastic slats, as manufactured by;

DuMor, Inc. P.O. Box 142 Mifflintown, PA 17059 1-800-598-4018 www.dumor.com

*An approved equal shall mean a factory fabricated system which meets the dimensional, structural, physical characteristics and fastener pattern of the representative bench system noted above. If the contractor chooses to seek approval for an alternative system then he must provide the City of Newton with a manufacturer's catalog cut which clearly indicates the physical attributes of the system. If the contractor chooses to seek approval for an alternative system then he must provide the City of Newton with a catalog cut which clearly indicates the physical attributes of the alternative system, so that the City of Newton can readily perform a comparison assessment . Further, the City of Newton

reserves the right to request, and subsequently either approve or disapprove of the alternative system, prior to awarding the bid.

"Equality" - An item equal to that named or described in the specifications of the contract may be furnished by the Vendor and the naming of any commercial name, trademark or other identification shall not be construed to exclude any item or manufacturer not mentioned by name or as limiting competition but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval before the use or fabrication of such items.

Subject to the provisions of M.G.L., Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Vendor's expense. All directions, specifications and

recommendations by manufacturers for installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Vendor.

(c) Manufacturer's warranties are to be assigned and delivered to the City of Newton.

Method of Construction

- (d) The Contractor shall excavate and immediately dispose of the existing bench and shall subsequently backfill the apertures with rammed gravel before the new apertures are created to install the new bench system.
- (e) The Contractor shall install each new bench in accordance with the directives shown on the plan and in accordance with the manufacturer's instructions.

Method of Measurement

(f) Under **THIS ITEM** the Contractor shall be paid **for each** new bench furnished and installed complete in place, inclusive of the removal and the immediate disposal of the existing bench it replaces.

Basis of Payment

(g) Under **THIS ITEM** the Contractor will be paid the contract unit price **for each** new bench furnished and installed complete-in-place, inclusive of the removal and the immediate disposal of the existing bench it replaces (regardless of its existing location on the site), which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

ITEM ALTERNATE 4 - SHADE STRUCTURE

GENERAL

The contractor shall supply, deliver and install the proposed shade structure as detailed in this item providing

1.1 DESCRIPTION OF PRODUCT

- A. SSG 12x12 (Sun Shelter Gable Roof) with Multi-Rib Metal Roof "R" Panel.
- B. ROOF SLOPE: 4/12.
- C. Minimum Clearance Height (MCH): **7.5 in ft.** Minimum clearance height under the structure indicates the lowest height of a member from finish grade for clearance under the structure. This is generally the clearance under roof eave or frame, whichever is lower.

1.2 REFERENCES

- A. REFERENCE STANDARDS:
 - 1. AISC American Institute of Steel Construction Manual of Steel Construction.
 - 2. ASTM American Society for Testing and Materials.
 - 3. AWS American Welding Society.
 - 4. LEED Leadership in Energy and Environmental Design.
 - 5. OSHA Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
 - 6. PCI Powder Coating Institute.
 - 7. SSPC The Society for Protective Coatings.

1.3 SUBMITTALS

- A. Submit 4 sets of submittal drawings and 2 sets of calculation books, both signed and sealed by a Professional Engineer licensed in the Commonwealth of Massachusetts.
- B. PRODUCT DESIGN REQUIREMENTS:

The building shall meet the following design requirements:

- 1. Building Code: IBC 2009.
- 2. Ground Snow Load (Pg): 55.
- 3. Basic Wind Speed (V): **100**.
- 4. Seismic Design: See drawings.
- c. SUBMITTAL REQUIREMENTS:

Calculations and Submittal drawings shall include, at a minimum:

- 1. Calculations:
 - a. References to building codes and design manuals used for calculations.

- b. Identification of lateral force resisting system.
- c. Formulas used for determining snow, wind, and seismic loads to specific project location.
- d. Three dimensional modeling input, model geometry, and analysis results.
- e. Member design results and controlling load combinations.
- f. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.
- g. Foundation designs shall include the required combinations of gravity and lateral loads.

2. Submittal Drawings:

- a. Anchor bolt layout.
- b. Foundation design.
- c. Three dimensional views of frame.
- d. Member sizes and locations.
- e. Structural connection details, including bolt sizes and plate thicknesses.
- f. Roof trim and connection details for installation clarity.

D. FOUNDATION DESIGN:

- 1. The shelter shall be set on foundations designed by manufacturer.
- 2. Foundation materials shall be provided by contractor.
- 3. Owner shall provide manufacturer with complete information about the site including soil bearing capacity and lateral load capacity.
- 4. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

E. ANCHOR BOLTS:

Anchor bolts shall be provided by manufacturer.

F. LEED SUBMITTALS:

LEED MR Credit 4.0: Material and Resources, Recycled Content.

1.4 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS:

- 1. Minimum of (10) years in the shelter construction industry.
- 2. Full time on-staff Licensed Engineer.
- 3. Full time on-staff AWS Certified Associate Welding Inspector.
- 4. Full time on-staff Quality Assurance Manager.
- 5. Full time on-staff LEED AP.
- 6. All welders AWS Certified.
- 7. Manufacturer owned and controlled finishing system to include shot blast, pretreatment, primer, and top coat.
- 8. Published Quality Management System.

- 9. Annual audit of Quality System and Plant Processes by Third Party Agency.
- 10. Annual audit of powder coat finish system by Third Party Agency (PCI).

B. MANUFACTURER'S CERTIFICATIONS:

1. PCI 4000 S Certified, Certification thru Powder Coating Institute for original equipment manufacturers (OEMs) to evaluate process on entire finish system to add powder coat over steel.

1.5 FIELD OR SITE CONDITIONS

A. Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.6 MANUFACTURER WARRANTY

- A. Shelter must have a (10) year limited warranty on steel frame members.
- B. Shelter must have a (10) year limited warranty on paint system.
- C. Pass through warranty of Metal Roof manufacturer shall be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. MANUFACTURERS:

- 1. Acceptable Manufacturer: Poligon, a Product of Porter Corp, 4240 N 136th Ave., Holland, MI, 49424; 616.399.1963; E-mail: info@poligon.com; www.poligon.com. OR APPROVED EQUAL.
- 2. The product shall be designed, produced, and finished at a facility operated and directly supervised by the supplier who has a minimum of (10) years in the business of making pre-manufactured shelters.

B. SUBSTITUTION LIMITATIONS:

- 1. Substitutions must be approved a minimum of (10) days before bid. All approved manufacturers shall be notified in writing before the bid date and shall not be allowed to bid without written notification.
- 2. Alternate suppliers must meet the qualifications and provide proof of certifications listed under Section 1.4 QUALITY ASSURANCE.
- 3. Alternate suppliers must provide an equivalent paint system to Poligon's Poli-5000 listed under Section 2.1 C. 8. FINISHES.
- 4. Staff members' cumulative experience in fabrication will not be an acceptable alternative for manufacturer's experience in the shelter construction industry.

C. PRODUCT REQUIREMENTS AND MATERIALS:

1. GENERAL:

The pre-engineered package shall be pre-cut unless otherwise noted and prefabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked down to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.

2. REINFORCED CONCRETE:

- a. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings.
- b. Reinforcing shall be ASTM A615, grade 60.

3. STEEL COLUMNS:

- a. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 3/16".
- b. Unless columns are direct buried, columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).

4. STRUCTURAL FRAMING:

Hollow Structural Steel tube minimum ASTM A500 grade B, "I" beams, tapered columns or open channels shall not be accepted for primary beams. Frame will have a **STANDARD POLI-5000** finish. Color chosen from manufacturer's standard color chart: **to be determined by the owner.**

5. COMPRESSION MEMBERS:

Compression Rings of structural channel or welded plate minimum ASTM A36 or compression tubes of structural steel tube minimum ASTM A500 grade B shall only be used.

6. CONNECTION REQUIREMENTS:

- a. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
- b. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and A563 high strength nuts.
- c. Structural fasteners shall be hidden within framing members wherever possible.
- d. No field welding shall be required to construct the shelter.
- e. All welds shall be free of burrs and inconsistencies.
- f. Exposed fasteners shall be powder coated by manufacturer prior to shipment to match frame or roof colors as applicable.
- g. Manufacturer shall provide extra structural and roofing fasteners.

7. ROOFING MATERIALS:

a. PRIMARY ROOF DECK OF "R" PANEL METAL ROOFING (MR):

- 1) Roofing shall be 24 gauge ribbed galvalume steel sheets, with ribs 1 3/16" high and 12" on center.
- 2) Roof surface shall be painted with Kynar 500 to the manufacturer's standard color: **to be determined by the owner.**

Ceiling surface shall be a "wash coat" primer.

- 3) Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
- 4) Metal roofing trim shall match the color of the roof and shall be factory made of 26 gauge Kynar 500 painted steel.
- 5) Trim shall include panel ridge caps, hip caps, eave trim, splice channels, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Installation drawings shall have detailed information on how to cut and affix roof trim.
- 6) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
- 7) Roof peak cap shall be pre-manufactured.
- 8) Manufacturer shall supply painted screws and butyl tape.

8. FINISHES:

- a. STANDARD POLI-5000 FINISH:
 - 1) Steel shall be cleaned, pretreated and finished at a facility owned and directly supervised by the manufacturer.
 - 2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
 - 3) Parts shall be pretreated in a 3 stage iron phosphate or equal washer.
 - 4) Epoxy primer powder coat shall be applied to parts for superior corrosion protection.
 - 5) Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.
 - 6) Finish shall not have any VOC emissions.
 - 7) Sample production parts shall have been tested and meet the following criteria:
 - a) Salt spray resistance per ASTM B 117/ ASTM D 1654 to 10,000 hours with no creep from scribe line and rating of 10.
 - b) Humidity resistance per ASTM D2247-02 to 5,000 hours with no loss of adhesion or blistering.
 - c) Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).
 - 8) The manufacturer shall be PCI 4000 S Certified.
 - 9) Exposed fasteners for frame and ornamentation shall be powder

PART 3 - EXECUTION

3.1 INSTALLERS STORAGE AND HANDLING

- A. Protect building products after arrival at destination from weather, sunlight, and damage.
- B. Installer shall store product elevated to allow air circulation and to not introduce mold, fungi decay or insects to the product.
- C. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted and may void manufacturer's warranty.

3.2 ERECTION

A. INSTALLATION:

Install all components according to manufacturer's installation instructions and these specifications.

B. GENERAL CONTRACTOR:

Interface with other work is to be coordinated by the customer or the customer's agent. Certain designs have electrical or other plumbing requirements that are not supplied by Poligon.

c. TOLERANCES:

Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or column layout details.

D. OSHA COMPLIANCE:

OSHA Compliance to Steel Erection Standard 29CRF 1926 Subpart R-Steel Erection.

3.3 REPAIR

A. Do not attempt any field changes without first contacting Poligon.

3.4 FIELD OR SITE QUALITY CONTROL

A. Field or Site Tests and Inspections are not required by Poligon but may be required by the customer or by the local building inspector.

PART 4 – MEASUREMENT AND PAYMENT

4.0 Method of Measurement

Under **THIS ITEM** the Contractor shall be paid **for each** new shade structure furnished and installed complete in place according to these specifications and the contract drawings.

4.1 Basis of Payment

Under **THIS ITEM** the Contractor will be paid the contract unit price **for each** new shade structure furnished and installed complete-in-place, inclusive of all excavation, cement concrete, gravel materials and other materials as necessary, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

END OF SECTION

City of Newton

Massachusetts 02459	Date Issued	

Expiration Date_____

Permit Number _____

Engineering Division

Phone (617) 796-1020

FAX (617) 796-1051



TRENCH PERMIT Pursuant to G.L. c. 82A §1 and 520 CMR 7.00 et seq.(as amended)

THIS PERMIT MUST BE FULLY COMPLETED PRIOR TO CONSIDERATION

TIED K 19					
Name of Applicant			Phone	Cell	
Street Address					
City/Town	MA	ZIP			
Name of Excavator (if different from applicant)			Phone	Cell	
Street Address					
City/Town	MA	ZIP			
Name of Owner(s) of Property				Phone	Cell
Street Address					
City/Town	MA	ZIP			
Other Contact			Permit Fee Re	ceived No()	Ves ()
Description, location and purpos	e of pro	nosed tren		110 ()	165 ()
Please describe the exact location				urpose (include	a description of what is (or is
					erse side if additional space is needed.
		. 0/11			•
Insurance Certificate #:					
insurance ceremicate ii.					
Name and Contact Information of	of Insur	er:			

Policy Expiration Date: Dig Safe #:				
Dig Safe #:				
Name of Competent Person (as defined by 520 CMR 7.0	2):			
Massachusetts Hoisting License #				
License Grade:	Expiration Date:			
CERTIFY THAT THEY ARE FAMILIAR WITH, OR, BECOME FAMILIAR WITH, ALL LAWS AND RE INCLUDING OSHA REGULATIONS, G.L. c. 82A, 520 ORDINANCES, BY-LAWS AND REGULATIONS ANI DONE UNDER THE PERMIT ISSUED FOR SUCH WO AND WITH THE CONDITIONS SET FORTH BELOW. THE UNDERSIGNED OWNER AUTHORIZES THE A EXCAVATOR TO UNDERTAKE SUCH WORK ON THE DURATION OF CONSTRUCTION, AUTHOMUNICIPALITY TO ENTER UPON THE PROPER	TER, AND EXCAVATOR ALL ACKNOWLEDGE AND BEFORE COMMENCEMENT OF THE WORK, WILL GULATIONS APPLICABLE TO WORK PROPOSED, CMR 7.00 et seq., AND ANY APPLICABLE MUNICIPAL OTHEY COVENANT AND AGREE THAT ALL WORK ORK WILL COMPLY THEREWITH IN ALL RESPECTS PPLICANT TO APPLY FOR THE PERMIT AND THE THE PROPERTY OF THE OWNER, AND ALSO, FOR ORIZES PERSONS DULY APPOINTED BY THE TY TO MONITOR AND INSPECT THE WORK FOR			
CONFORMITY WITH THE CONDITIONS ATTACH GOVERING SUCH WORK.	ED HERETO AND THE LAWS AND REGULATIONS			
THE UNDERSIGNED APPLICANT, OWNER AND EXC REIMBURSE THE MUNICIPALITY FOR ANY AND A MUNICIPALITY IN CONNECTION WITH THIS PERM INCLUDING BUT NOT LIMITED TO ENFORCING TI CONDITIONS OF THIS PERMIT, INSPECTIONS MAI MEASURES TAKEN BY THE MUNICIPALITY TO PR OWNER OR EXCAVATOR HAS FAILED TO COMPLY OTHER REMEDIAL MEASURES DEEMED NECESSA	LL COSTS AND EXPENSES INCURRED BY THE IIT AND THE WORK CONDUCTED THEREUNDER, HE REQUIREMENTS OF STATE LAW AND DE TO ASSURE COMPLIANCE THEREWITH, AND OTECT THE PUBLIC WHERE THE APPLICANT Y THEREWITH INCLUDING POLICE DETAILS AND			
THE UNDERSIGNED APPLICANT, OWNER AND EXCAVATOR AGREE JOINTLY AND SEVERALLY TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE MUNICIPALITY AND ALL OF ITS AGENTS AND EMPLOYEES FROM ANY AND ALL LIABILITY, CAUSES OR ACTION, COSTS, AND EXPENSES RESULTING FROM OR ARISING OUT OF ANY INJURY, DEATH, LOSS, OR DAMAGE TO ANY PERSON OR PROPERTY DURING THE WORK CONDUCTED UNDER THIS PERMIT.				
APPLICANT SIGNATURE				
	DATE			
EXCAVATOR SIGNATURE (IF DIFFERENT)				
	DATE			
OWNER'S SIGNATURE (IF DIFFERENT)				
	DATE:			

For City/Town use Do not write in this section			
PERMIT APPROVED BY	\$ Application Fee		
PERMITTING AUTHORITY Date			
CONDITIONS OF APPROVAL			

CONDITIONS AND REQUIREMENTS PURSUANT TO G.L.C.82A AND 520 CMR 7.00 et seq. (as amended)

By signing the application, the applicant understands and agrees to comply with the following:

- i. No trench may be excavated unless the requirements of sections 40 through 40D of chapter 82, and any accompanying regulations, have been met and this permit is invalid unless and until said requirements have been complied with by the excavator applying for the permit including, but not limited to, the establishment of a valid excavation number with the underground plant damage prevention system as said system is defined in section 76D of chapter 164 (DIG SAFE);
- ii. Trenches may pose a significant health and safety hazard. Pursuant to Section 1 of Chapter 82 of the General Laws, an excavator shall not leave any open trench unattended without first making every reasonable effort to eliminate any recognized safety hazard that may exist as a result of leaving said open trench unattended. Excavators should consult regulations promulgated by the Department of Public Safety in order to familiarize themselves with the recognized safety hazards associated with excavations and open trenches and the procedures required or recommended by said department in order to make every reasonable effort to eliminate said safety hazards which may include covering, barricading or otherwise protecting open trenches from accidental entry.
- iii. Persons engaging in any in any trenching operation shall familiarize themselves with the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CFR 1926.650 et seq., entitled Subpart P "Excavations".
- iv. Excavators engaging in any trenching operation who utilize hoisting or other mechanical equipment subject to chapter 146 shall only employ individuals licensed to operate said equipment by the Department of Public Safety pursuant to said chapter and this permit must be presented to said licensed operator before any excavation is commenced;
- v. By applying for, accepting and signing this permit, the applicant hereby attests to the following: (1) that they have read and understands the regulations promulgated by the Department of Public Safety with regard to construction related excavations and trench safety; (2) that he has read and understands the federal safety standards promulgated by the Occupational Safety and Health Administration on excavations: 29 CMR 1926.650 et seq., entitled Subpart P "Excavations" as well as any other excavation requirements established by this municipality; and (3) that he is aware of and has, with regard to the proposed trench excavation on private property or proposed excavation of a city or town public way that forms the basis of the permit application, complied with the requirements of sections 40-40D of chapter 82A.
- vi. This permit shall be posted in plain view on the site of the trench.

Summary of Excavation and Trench Safety Regulation (520 CMR 14.00 et seq.)

This summary was prepared by the Massachusetts Department of Public Safety pursuant to G.L.c.82A and does not include all requirements of the 520 CMR 14.00. To view the full regulation and G.L.c.82A, go to www/mass.gov/dps

Pursuant to M.G.L. c. 82, § 1, the Department of Public Safety, jointly with the Division of Occupational Safety, drafted regulations relative to trench safety. The regulation is codified in section 14.00 of title 520 of the Code of Massachusetts Regulations. The regulation requires all excavators to obtain a permit prior to the excavation of a trench made for a construction-related purpose on public or private land or rights-of-way. All municipalities must establish a local permitting authority for the purpose of issuing permits for trenches within their municipality. Trenches on land owned or controlled by a public (state) agency requires a permit to be issued by that public agency unless otherwise designated.

In addition to the permitting requirements mandated by statute, the trench safety regulations require that all excavators, whether public or private, take specific precautions to protect the general public and prevent unauthorized access to unattended trenches. Accordingly, unattended trenches must be covered, barricaded or backfilled. Covers must be road plates at least 3/4" thick or equivalent; barricades must be fences at least 6' high with no openings greater than 4" between vertical supports; backfilling must be sufficient to eliminate the trench. Alternatively, excavators may choose to

attend trenches at all times, for instance by hiring a police detail, security guard or other attendant who will be present during times when the trench will be unattended by the excavator.

The regulations further provide that local permitting authorities, the Department of Public Safety, or the Division of Occupational Safety may order an immediate shutdown of a trench in the event of a death or serious injury; the failure to obtain a permit; or the failure to implement or effectively use adequate protections for the general public. The trench shall remain shut down until re-inspected and authorized to re-open provided, however, that excavators shall have the right to appeal an immediate shutdown. Permitting authorities are further authorized to suspend or revoke a permit following a hearing. Excavators may also be subject to administrative fines issued by the Department of Public Safety for identified violations.

For additional information please visit the Department of Public Safety's website at www.mass.gov/dps

Summary of 1926 CFR Subpart P -OSHA Excavation Standard

This is a worker protection standard, and is designed to protect employees who are working inside a trench. This summary was prepared by the Massachusetts Division of Occupational Safety and not OSHA for informational purposes only and does not constitute an official interpretation by OSHA of their regulations, and may not include all aspects of the standard.

For further information or a full copy of the standard go to www.osha.gov.

• Trench Definition per the OSHA standard:

- o An excavation made below the surface of the ground, narrow in relation to its length.
- In general, the depth is greater than the width, but the width of the trench is not greater than fifteen feet.
- **Protective Systems** to prevent soil wall collapse are always required in trenches deeper than 5', and are also required in trenches less than 5' deep when the competent person determines that a hazard exists. Protection options include:
 - O Shoring. Shoring must be used in accordance with the OSHA Excavation standard appendices, the equipment manufacturer's tabulated data, or designed by a registered professional engineer.
 - O Shielding (Trench Boxes). Trench boxes must be used in accordance with the equipment manufacturer's tabulated data, or a registered professional engineer.
 - O Sloping or Benching. In Type C soils (what is most typically encountered) the excavation must extend horizontally 1 ½ feet for every foot of trench depth on both sides, 1 foot for Type B soils, and 34 foot for Type A soils.
 - A registered professional engineer must design protective systems for all excavations greater than 20' in depth.
- **Ladders** must be used in trenches deeper than 4'.
 - o Ladders must be inside the trench with workers at all times, and located within 25' of unobstructed lateral travel for every worker in the trench.
 - o Ladders must extend 3' above the top of the trench so workers can safely get onto and off of the ladder.
- **Inspections** of every trench worksite are required:
 - o Prior to the start of each shift, and again when there is a change in conditions such as a rainstorm.
 - o Inspections must be conducted by the competent person (see below).

• Competent Person(s) is:

- <u>Capable</u> (i.e., trained and knowledgeable) in identifying existing and predictable hazards in the trench, and other working conditions which may pose a hazard to workers, and
- Authorized by management to take necessary corrective action to eliminate the hazards. Employees must be removed from hazardous areas until the hazard has been corrected.

• Underground Utilities must be:

- o Identified prior to opening the excavation (e.g., contact Digsafe).
- Located by safe and acceptable means while excavating.
- o Protected, supported, or removed once exposed.
- **Spoils** must be kept back a minimum of 2' from the edge of the trench.
- Surface Encumbrances creating a hazard must be removed or supported to safeguard employees. Keep heavy equipment and heavy material as far back from the edge of the trench as possible.

• Stability of Adjacent Structures:

Where the stability of adjacent structures is endangered by creation of the trench, they must be underpinned, braced, or otherwise supported.

 Sidewalks, pavements, etc. shall not be undermined unless a support system or other method of protection is provided.

• Protection from water accumulation hazards:

- o It is not allowable for employees to work in trenches with accumulated water. If water control such as pumping is used to prevent water accumulation, this must be monitored by the competent person.
- o If the trench interrupts natural drainage of surface water, ditches, dikes or other means must be used to prevent this water from entering the excavation.

• Additional Requirements:

- o For mobile equipment operated near the edge of the trench, a warning system such as barricades or stop logs must be used.
- o Employees are not permitted to work underneath loads. Operators may not remain in vehicles being loaded unless vehicles are equipped with adequate protection as per 1926.601(b)(6).
- Employees must wear high-visibility clothing in traffic work zones.
- O Air monitoring must be conducted in trenches deeper than 4' if the potential for a hazardous atmosphere exists. If a hazardous atmosphere is found to exist (e.g., O₂ <19.5% or >23.5%, 20% LEL, specific chemical hazard), adequate protections shall be taken such as ventilation of the space.
- Walkways are required where employees must cross over the trench. Walkways with guardrails must be provided for crossing over trenches > 6' deep.
- Employees must be protected from loose rock or soil through protections such as scaling or protective barricades.